

Final
**Environmental Assessment for the
Implementation of the Privatization of Army Lodging Program at
Fort Huachuca, Arizona**

Prepared for

Commander, Fort Huachuca

Prepared by

U.S. Army Corps of Engineers, Mobile District

With technical assistance from

Tetra Tech, Inc.
San Francisco, CA

February 2011

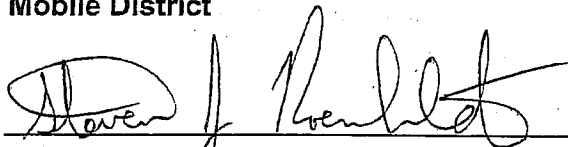
This page intentionally left blank.

ENVIRONMENTAL ASSESSMENT

IMPLEMENTATION OF THE PRIVATIZATION OF ARMY LODGING PROGRAM AT FORT HUACHUCA, ARIZONA

Prepared by:

US Army Corps of Engineers
Mobile District



Date: 11 MAR 11

STEVEN J ROEMHILDT
Colonel, Corps of Engineers
Commanding

Reviewed by:

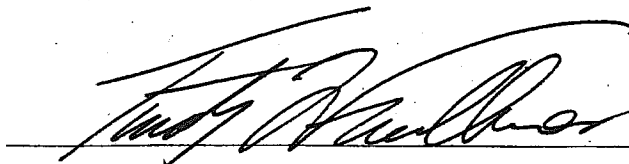
Fort Huachuca



Date: 7 APR 11

JOHN A. RUBLE, Director of Public Works
US Army Garrison Fort Huachuca

Approved by:



Date: 8 APR 11

TIMOTHY L. FAULKNER
Colonel, MI, Commanding
US Army Garrison Fort Huachuca

This page intentionally left blank.

ENVIRONMENTAL ASSESSMENT ORGANIZATION

This Environmental Assessment (EA) addresses the proposed action to implement the Privatization of Army Lodging (PAL) program at Fort Huachuca, Arizona. It has been developed in accordance with the National Environmental Policy Act and implementing regulations issued by the Council on Environmental Quality (Title 40 of the Code of Federal Regulations [CFR] Parts 1500-1508) and the Army (32 CFR Part 651). Its purpose is to inform decision makers and the public of the likely environmental and socioeconomic consequences of the Preferred Alternative and other alternatives.

An **EXECUTIVE SUMMARY** briefly describes the proposed action, environmental and socioeconomic consequences, and mitigation measures.

TABLE OF CONTENTS

SECTION 1.0: PURPOSE, NEED, AND SCOPE summarizes the purpose of and need for the proposed action and describes the scope of the environmental analysis process.

SECTION 2.0: PROPOSED ACTION AND ALTERNATIVES describes the proposed action to implement the PAL program at Fort Huachuca and examines alternatives to implementing the proposed action including a Preferred Alternative and the No Action Alternative.

SECTION 3.0: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES describes the existing environmental and socioeconomic setting at Fort Huachuca and identifies potential effects of implementing the Preferred Alternative and the No Action Alternative.

SECTION 4.0: CONCLUSIONS summarizes the environmental and socioeconomic effects of implementing the Preferred Alternative and the No Action Alternative.

SECTION 5.0: REFERENCES AND PERSONS CONSULTED provides bibliographical information for cited sources and provides a listing of persons and agencies consulted during preparation of this EA.

SECTION 6.0: LIST OF PREPARERS identifies the persons who prepared the document.

SECTION 7.0: MAILING LIST indicates recipients of this EA.

APPENDIX A: Record of Non-applicability

APPENDIX B: Economic Impact Forecast System

APPENDIX C: Consultations

An **ACRONYMS AND ABBREVIATIONS** list is provided at the end of the document.



Printed on Recycled Paper

This page intentionally left blank.

ENVIRONMENTAL ASSESSMENT

LEAD AGENCY: Fort Huachuca

TITLE OF PROPOSED ACTION: Implementation of the Privatization of Army Lodging Program at Fort Huachuca, Arizona

AFFECTED JURISDICTION: Fort Huachuca, Arizona

PREPARED BY: Steven J. Roemhildt, Commanding, US Army Corps of Engineers, Mobile District

REVIEWED BY: John A. Ruble, Director, Public Works, US Army Garrison Fort Huachuca

APPROVED BY: Timothy L. Faulkner, Colonel, MI, Commanding, US Army Garrison Fort Huachuca

ABSTRACT: This Environmental Assessment (EA) considers the proposed implementation of the Privatization of Army Lodging program, including the transfer of lodging assets at Fort Huachuca, Arizona. The EA identifies, evaluates, and documents the effects of obtaining private sector funding for construction, maintenance, management, renovation, replacement, rehabilitation, and development of transient lodging and ancillary supporting facilities. This is the Army's Preferred Alternative. A No Action Alternative is also evaluated. Implementing the Preferred Alternative is not expected to result in significant environmental impacts. Therefore, preparing an environmental impact statement is not required and a finding of no significant impact (FNSI) will be published, in accordance with 32 CFR Part 651, Environmental Effects of Army Actions, and the National Environmental Policy Act.

REVIEW COMMENT DEADLINE: The final EA and draft FNSI are available for review and comment for 30 days, beginning with publication of a notice of availability in the Sierra Vista Herald. An electronic copy of the final EA and draft FNSI is available online: <http://www.huachuca.army.mil>. Copies of the EA and draft FNSI can be obtained by contacting Todd Braswell, Lodging Manager, Fort Huachuca, Arizona 85613-7010; at (520) 538-0581, or by e-mail requests to todd.braswell@us.army.mil. Copies of the EA and draft FNSI are available for review at the Public Affairs Office. The documents are also available at the Sierra Vista Public Library. Comments on the EA and draft FNSI should be submitted to Todd Braswell no later than the end of the 30-day review period.

This page intentionally left blank.

EXECUTIVE SUMMARY

ES.1 BACKGROUND

This environmental assessment (EA) evaluates the proposal of the Privatization of Army Lodging (PAL) program at Fort Huachuca, Arizona.

ES.2 PROPOSED ACTION

The Army proposes to transfer ownership and operation of its transient lodging facilities to a private-sector development company. Under the proposed action, the Army would direct the implementation of the Lodging Development Management Plan, lease, and supporting agreements negotiated with and approved by the Office of the Assistant Secretary of the Army for Installations and Environment. The Army would convey specified lodging facilities and lease the underlying land to its selected developer, Actus Lend Lease (Actus). Actus has formed a special-purpose entity, Rest Easy, LLC (Rest Easy) to execute the lease with Army as lessor and Rest Easy as lessee. Actus would redevelop the lodging facilities, and InterContinental Hotels Group, its contracted hotelier, would manage the lodging operations. The Army would grant a combination of 5-year short-term hold (STH) and 50-year long-term hold (LTH) leases of the land underlying the existing facilities and other land for constructing new lodging facilities. Rest Easy would be expected to meet Fort Huachuca's lodging requirements through operating and maintaining the existing facilities and by renovating inadequate facilities and constructing new ones.

Rest Easy proposes to make interior renovations and necessary safety modifications to the existing lodging units: Buildings 43083, 43084, 43085, 43086 (Parcel A); Building 52054 (Parcel C); and Buildings 22102 and 22104 (Parcel E). The existing lodging would be used during the initial development period while a new 519-room Candlewood Suites hotel is being constructed on Parcel F. After the new lodging is completed, Rest Easy would demolish all the structures in Parcels A and C and return excess land to the Army. The historic structures and land in Parcel E would also return to the Army at the end of the short-term lease period. As a result of the action, the lodging inventory at Fort Huachuca would increase from 284 to 519 units. The proposed action would improve the quality of life for Soldiers, their families, and other personnel eligible to use Army transient lodging. The initial development period would occur over about 5 years beginning in 2011.

ES.3 PURPOSE AND NEED

The purpose of the proposed action is to transfer operation of transient lodging at Fort Huachuca to the private sector.

The need for the proposed action is to improve the quality of life for Soldiers, their families, and other personnel eligible to use Army lodging. Much of the lodging at Fort Huachuca is old, and its rehabilitation is not economically feasible. Several historic buildings used for transient housing have room sizes and configurations that render them inefficient for lodging. By leveraging scarce resources, the Army can obtain the benefits of capital improvements and professional management that are available through the private sector's investment and experience.

ES.4 ALTERNATIVES

This EA is an analysis of the Preferred Alternative and the No Action Alternative. It also identifies alternatives considered but eliminated from detailed study.

Implementing the PAL program at Fort Huachuca is the Army's Preferred Alternative. Through implementation of the Lodging Development Management Plan, the Army proposes that the private development entity, Actus, assume the operation and maintenance of temporary lodging at Fort Huachuca, which would achieve the purpose of and need for the proposed action.

Under the No Action Alternative, the Army would not implement the PAL program at Fort Huachuca and would continue to provide lodging through the facilities funded by congressional appropriations and by Army lodging resources that rely on nonappropriated funds. In all likelihood, quality of life for personnel using the lodging would decline, based on current funding levels.

Another alternative of discontinuing lodging operations and relying on private sector of lodging services was rejected because of substantial cost that would be incurred by converting the lodging to alternative uses. The combination of idling the existing facilities until alternative uses could be determined and the time needed to achieve such alternative uses would contravene the Army's policy to manage its resources to optimal potential. As such, this alternative was not evaluated in this EA.

ES.5 ENVIRONMENTAL CONSEQUENCES

The EA considers potential effects on a wide range of environmental resources and conditions, including land use, aesthetic and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics (including environmental justice and protection of children), transportation, utilities, and hazardous and toxic substances.

Implementing the Preferred Alternative would result in a mixture of minor adverse and minor beneficial effects on the subject environmental resources and conditions. For each resource area, the predicted effects from both the Preferred Alternative and the No Action Alternative are summarized in Table ES-1.

Table ES-1
Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Effects	
	Preferred Alternative	No Action Alternative
Land use	No adverse effect	No effect
Aesthetic and visual resources	Short- and long-term minor adverse Long-term minor beneficial	No effect
Air quality	Short- and long-term minor adverse	No effect
Noise	Short-term minor adverse	No effect
Geology and soils	Short-term minor adverse	No effect
Water resources	Short-minor adverse	No effect
Biological resources	Short-term minor adverse	No effect
Cultural resources	No adverse effect	No effect
Socioeconomics	Short-term minor adverse Short- and long-term minor beneficial	No effect
Transportation	Short- and long-term minor adverse	No effect
Utilities	Short-term minor adverse Long-term minor beneficial	No effect
Hazardous and toxic substances	Short-term minor adverse Long-term minor beneficial,	Long-term minor adverse

ES.6 CONCLUSION

On the basis of the EA, it has been determined that implementing the Preferred Alternative would have no significant adverse effects on the quality of human life or the natural environment. Issuance of a Finding of No Significant Impact (FNSI) would be appropriate, and an environmental impact statement need not be prepared before implementing the Preferred Alternative.

This page intentionally left blank.

CONTENTS

SECTION 1.0 Purpose, Need, and Scope.....	1-1
1.1 Introduction	1-1
1.2 Purpose and Need.....	1-1
Insert Figure 1-1. Fort Huachuca Location Map	
1.3 Scope of Analysis.....	1-2
1.4 Public Involvement	1-3
1.5 Privatization Authorities	1-3
1.6 Environmental Laws and Regulations.....	1-4
SECTION 2.0 Proposed Action and Alternatives	2-1
2.1 Introduction	2-1
2.2 No Action Alternative	2-1
2.3 Preferred alternative	2-1
2.3.1 Description of Existing Lodging and Available Land	2-1
2.3.2 Proposed Lodging Actions.....	2-9
2.4 Alternative considered but eliminated from detailed study.....	2-11
SECTION 3.0 Affected Environment and Environmental Consequences	3-1
3.1 Land Use	3-1
3.1.1 Affected Environment.....	3-1
3.1.2 Environmental Consequences	3-1
3.2 Aesthetics and Visual resources	3-2
3.2.1 Affected Environment.....	3-2
3.2.2 Environmental Consequences	3-3
3.3 Air Quality	3-4
3.3.1 Affected Environment.....	3-4
3.3.2 Environmental Consequences	3-5
3.4 Noise	3-7
3.4.1 Affected Environment.....	3-7
3.4.2 Environmental Consequences	3-7
3.5 Geology and Soils	3-8
3.5.1 Affected Environment.....	3-8
3.5.2 Environmental Consequences	3-9
3.6 Water Resources.....	3-9
3.6.1 Affected Environment.....	3-9
3.6.2 Environmental Consequences	3-11
3.7 Biological Resources.....	3-13
3.7.1 Affected Environment.....	3-13
3.7.2 Environmental Consequences	3-13
3.8 Cultural Resources	3-14
3.8.1 Affected Environment.....	3-14
3.8.2 Environmental Consequences	3-15
3.9 Socioeconomics.....	3-18
3.9.1 Affected Environment.....	3-18

3.9.2 Environmental Consequences	3-20
3.10 Transportation	3-22
3.10.1 Affected Environment.....	3-22
3.10.2 Environmental Consequences	3-22
3.11 Utilities.....	3-23
3.11.1 Affected Environment.....	3-23
3.11.2 Environmental Consequences	3-25
3.11.2.1Preferred Alternative.....	3-25
3.11.2.2No Action Alternative.....	3-27
3.12 Hazardous and Toxic Substances	3-27
3.12.1 Affected Environment.....	3-27
3.12.2 Environmental Consequences	3-28
3.12.2.1Preferred Alternative.....	3-29
3.12.2.2No Action Alternative.....	3-29
3.13 Cumulative Effects Summary	3-30
3.14 Mitigation Summary	3-30
SECTION 4.0 Conclusions.....	4-1
SECTION 5.0 References and Persons Consulted	5-1
SECTION 6.0 List of Preparers.....	6-1
SECTION 7.0 Mailing List	7-1

APPENDICES

APPENDIX A: Record of Non-Applicability (RONA) and Emission Calculations	A-1
APPENDIX B: Economic Impact Forecast System	B-1
APPENDIX C: Consultations	C-1

Figures

1-1 Fort Huachuca Location Map	1-2
2-1 Fort Huachuca PAL Site Map.....	2-3
2-2 Parcel A	2-4
2-3 Parcel C.....	2-5
2-4 Parcel E.....	2-6
2-5 Parcel F	2-7
2.6 Photos of Lodging and Parcels	2-8

Tables

2-1 Existing Lodging Facilities, Fort Huachuca2-2

3-1 2009 Annual Emission at Fort Huachuca3-5

3-2 Annual Air Emissions Compared to Applicability Thresholds3-6

3-3 Population Characteristics3-18

3-4 Housing Characteristics3-19

4-1 Summary of Potential Environmental and Socioeconomic Consequences.....4-1

This page intentionally left blank.

SECTION 1.0

PURPOSE, NEED, AND SCOPE

1.1 INTRODUCTION

The Army provides transient lodging for Soldiers and their families on temporary duty (TDY) and permanent change of station (PCS) travel. Because funding shortfalls over many years have prevented the proper maintenance, repair, or replacement of facilities, approximately 80 percent of the Army's lodging inventory does not meet acceptable quality standards.

The Privatization of Army Lodging (PAL) program is an initiative to improve facilities and services for transient lodging users. The PAL program is founded on the Military Housing Privatization Initiative (MHPI) established in the 1996 Defense Authorization Act.¹ The MHPI authorizes the Army to obtain private capital by leveraging government contributions, making efficient use of limited resources, and using a variety of private-sector approaches to build, renovate, and operate lodging. This environmental assessment (EA) evaluates implementation of the PAL program at Fort Huachuca, Arizona.

The Army has divided its installations into three groups for implementing the PAL program. Group A consists of 10 installations: Fort Hood and Fort Sam Houston, Texas; Fort Sill, Oklahoma; Fort Riley and Fort Leavenworth, Kansas; Fort Rucker, Alabama; Fort Myer, Virginia; Yuma Proving Ground, Arizona; Fort Polk, Louisiana; and Fort Shafter/Tripler Army Medical Center, Hawaii. Implementation of the PAL program at Group A installations is now underway. Group B, which includes Fort Huachuca, involves 11 installations, having 4,916 guest rooms. The other installations in Group B are Fort Buchanan, Puerto Rico; Fort Belvoir, Virginia; Fort Hamilton, New York; Fort Gordon, Georgia; White Sands Missile Range, New Mexico; Fort Bliss, Texas; Fort Leonard Wood, Missouri; Fort Wainwright, Alaska; Fort Knox and Fort Campbell, Kentucky. Group C will involve implementing the program at the remainder of the Army's installations.

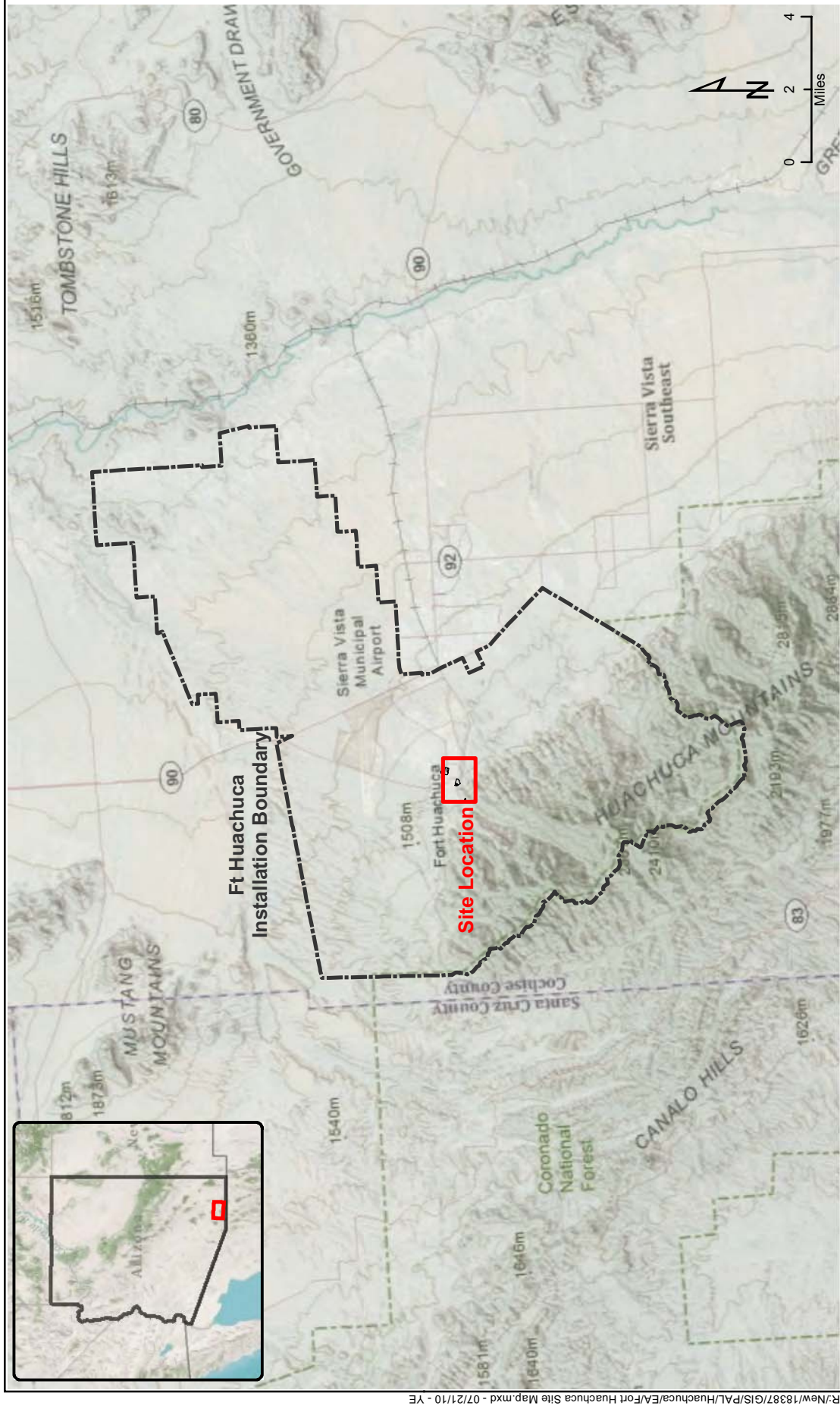
1.2 PURPOSE AND NEED

The Army proposes to privatize operation of its lodging at Fort Huachuca (Figure 1-1). This is the Army's Preferred Alternative. The purpose of the Preferred Alternative is to transfer operation of the transient lodging to the private sector under a long-term lease.

The need for the proposed action is to improve the quality of life for Soldiers, their families, and other personnel eligible to use Army lodging. Many lodging facilities at Fort Huachuca are old, and their rehabilitation is not economically feasible. Several historic buildings used for transient housing have room sizes and configurations that render them inefficient for lodging. By leveraging scarce resources, the Army can obtain the benefits of capital improvements and professional management that are available through the private sector's investment and experience. In addition, the PAL program sets aside funds for the long-term sustainment of such facilities. Privatization of lodging would also enable the Army to focus its management efforts on its core competencies, as required by the President's Management Agenda.²

¹Section 2801, National Defense Authorization Act for Fiscal Year 1996, Public Law 104-106, as amended (codified at Title 10 of the *United States Code* (USC), Sections 2871–2885).

²Information on the President's initiative is available at <http://www.whitehouse.gov/omb/budget/fy2002/mgmt.pdf>.



Fort Huachuca Location Map

Fort Huachuca
Sierra Vista, Arizona

Figure 1-1

1.3 SCOPE OF ANALYSIS

This EA has been developed in accordance with the National Environmental Policy Act (NEPA) of 1969 and implementing regulations issued by the Council on Environmental Quality (CEQ) and the Army.³ An interdisciplinary team of environmental scientists, biologists, ecologists, geologists, planners, economists, engineers, archaeologists, historians, lawyers, and military technicians reviewed the proposed action in light of existing conditions and has identified relevant beneficial and adverse effects associated with the Preferred Alternative and the No Action Alternative.

The purpose of the EA is to inform Army decision makers and the public of the likely environmental consequences of privatizing transient lodging at Fort Huachuca.

This EA focuses on evaluating environmental effects that are reasonably foreseeable within the initial development period (IDP), which is the first five years of implementation of privatization, described in detail in Section 2.3. This is the period during which the Army's privatization entity would accomplish demolition, renovation, and new construction of lodging, as well as take responsibility for the operation and maintenance of existing lodging facilities. Potential environmental effects beyond 2016 would be speculative, and therefore they are not analyzed in this EA.

1.4 PUBLIC INVOLVEMENT

The Army invites public participation in the NEPA process. Consideration of the views and information of all interested persons promotes open communication and enables better decision-making. All agencies, organizations, and members of the public having a potential interest in the proposed action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision making process.

Army guidance provides for public participation in the NEPA process. If the EA concludes that the proposed action would not result in significant environmental effects, the Army may issue a draft Finding of No Significant Impact (FNSI). The Army will then observe a 30-day period during which agencies and the public may submit comments on the EA or draft FNSI. Upon consideration of any comments received from the public or agencies, the Army may approve the FNSI and implement the Preferred Alternative. If, however, during the development of the EA it is determined that significant effects would be likely, the Army will issue a notice of intent to prepare an environmental impact statement.

1.5 PRIVATIZATION AUTHORITIES

The PAL program is founded on the MHPI. The essence of the MHPI is that it comprehensively allows access to private sector financial and management resources for constructing, maintaining, managing, renovating, replacing, rehabilitating, and developing housing. In 2002 Congress amended the MHPI to provide that unaccompanied personnel housing includes "transient housing intended to be occupied by members of the armed forces on temporary duty."⁴

The Army has competitively selected Actus Lend Lease (Actus) as its development entity to privatize the Army lodging at Fort Huachuca. Actus has formed a special-purpose entity, Rest

³Council on Environmental Quality *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*, Title 40 of the *Code of Federal Regulations* (CFR), Parts 1500–1508, and *Environmental Analysis of Army Actions*, 32 CFR Part 651.

⁴Section 2803(b), National Defense Authorization Act for Fiscal Year 2003, Public Law 107-314.

Easy, LLC (Rest Easy) to execute the lease. Actus would perform the redevelopment of the lodging facilities, and InterContinental Hotels Group, its contracted hotelier, would take over the lodging operations. Actus has completed a Lodging Development Management Plan (LDMP) to serve as the business plan for the program. The LDMP will be expanded to include additional installations, including Fort Huachuca. Upon approval of the revised LDMP, transfer of assets and transition to the developer conducting operations would begin. For its part, the Army would convey its lodging facilities to the developer and provide long-term leases for the underlying land. In return, the Army would obtain the benefit of modern facilities and services that equal the standards prevailing in the commercial sector.

1.6 ENVIRONMENTAL LAWS AND REGULATIONS

Army decisions that affect environmental resources and conditions occur within the framework of numerous laws, regulations, and Executive Orders (EOs). Some of these authorities prescribe standards for compliance. Others require specific planning and management actions to protect environmental values potentially affected by Army actions. These include the Clean Air Act, Clean Water Act, Noise Control Act, Endangered Species Act, National Historic Preservation Act, Archaeological Resources Protection Act, Resource Conservation and Recovery Act, Energy Policy Act, Energy Independence and Security Act, and Toxic Substances Control Act. EOs bearing on the proposed action include EO 11988 (*Floodplain Management*); EO 11990 (*Protection of Wetlands*); EO 12088 (*Federal Compliance with Pollution Control Standards*); EO 12580 (*Superfund Implementation*); EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*); EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*); EO 13175 (*Consultation and Coordination with Indian Tribal Governments*); EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*); EO 13423 (*Strengthening Federal Environmental, Energy, and Transportation Management*); and EO 13514 (*Federal Leadership in Environmental, Energy, and Economic Performance*). Where useful to better understanding, key provisions of these statutes and EOs are described in more detail in the text of the EA. The text of EOs can be accessed at <http://www.archives.gov/federal-register/executive-orders/>, and the text of public laws can be accessed at <http://www.archives.gov/federal-register/laws/>.

SECTION 2.0

PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The Army proposes to implement the PAL program at Fort Huachuca. The Army would convey specified lodging facilities to Rest Easy. The Army would also grant a 5-year lease of the land underlying the existing facilities, and 50-year lease of other land for construction of new lodging facilities. Rest Easy would be expected to meet Fort Huachuca's lodging requirements by operating and maintaining the existing facilities, as well as renovating inadequate facilities and constructing new ones.

Implementing the PAL program at Fort Huachuca would entail constructing new lodging and renovating existing facilities. When siting facilities, garrison commanders take into account the following criteria: availability of developable land, consistency with the land use allocations of the installation's master plan, compatibility with adjacent functions, proximity to relevant community services (e.g., commissary, Post Exchange, and recreation and entertainment venues), and avoidance of evident environmental issues (e.g., protected species, cultural resources, and past hazardous waste sites). Fort Huachuca officials also gave substantial weight to the proximity of new lodging to existing lodging and their required support functions to enable efficient and cost-effective management. These criteria resulted in the locations identified in Figure 2-1.

This section presents the Preferred Alternative and the No Action Alternative. It also identifies alternatives considered but eliminated from detailed study. The proposed action presented at Section 2.3 is the Army's Preferred Alternative.

2.2 NO ACTION ALTERNATIVE

Inclusion of the No Action Alternative, prescribed by CEQ regulations, serves as a baseline against which the impacts of the Preferred Alternative and alternatives can be evaluated.

Under the No Action Alternative, the Army would not implement the PAL program at Fort Huachuca. The Army would continue to provide lodging through the use of facilities funded by Congressional appropriations and by Army Lodging resources that rely on the use of nonappropriated funds. On the basis of historical trends, it is assumed that the amount of Congressional funding for personnel on temporary duty would not change and that maintenance backlogs would remain at present levels or continue to increase. In the absence of implementing the PAL program, the Army would forego opportunities to leverage private-sector financing for the lodging function. Quality of life for personnel using the lodging facilities would in all likelihood further decline based on current funding levels.

2.3 PREFERRED ALTERNATIVE

2.3.1 Description of Existing Lodging and Available Land

Fort Huachuca provides on-post transient lodging services through the use of 284 lodging units within 10 buildings located throughout the cantonment area. For the purposes of this project, the lodging units and areas available for new construction have been grouped into six distinct parcels of land, labeled A, B, C, D, E, and F. Existing lodging at Fort Huachuca are located on Parcels A through E. Under the Preferred Alternative, lodging would be located on Parcels A, C, E, and F. Parcels B and D would not convey to Rest Easy, and therefore are not part of the proposed action. Table 2-1 identifies the existing lodging inventory by parcel. Figure 2-1 shows the location of Parcels A, B, C, D, E, and F within Fort Huachuca. Figures 2-2 through 2-5 provide more

detailed views of the parcels that would be included under the Preferred Alternative (Parcels A, C, E, and F), and Figure 2-6 shows photos of a representative sample of the structures.

Table 2-1
Existing Lodging Facilities, Fort Huachuca

Parcel	Building(s)	Building Name	Year Built	Lodging Units	Square Footage
Parcel A	B22040 ⁵	N/A	1931	0	N/A
	B43083	Glassford Hall	1974	155	69,078
	B43084	Maubourne Hall	1969	39	19,053
	B43085	Olmstead Bachelor Officer Quarters	1968	23	11,305
	B43086	Fisher Hall	1958	27	22,927
Parcel B	B22028	Utah House	1933	1	1,492
Parcel C	B52054	Holman House	1971-1972	21	11,293
Parcel D	B42017	Allen House	1915	12	9,808
Parcel E	B22104	Hazen House	1891	6	6,654
	B22102	Hazen Annex	1891	0	1,232
Total lodging units				284	

N/A = not applicable

*National Register of Historic Places

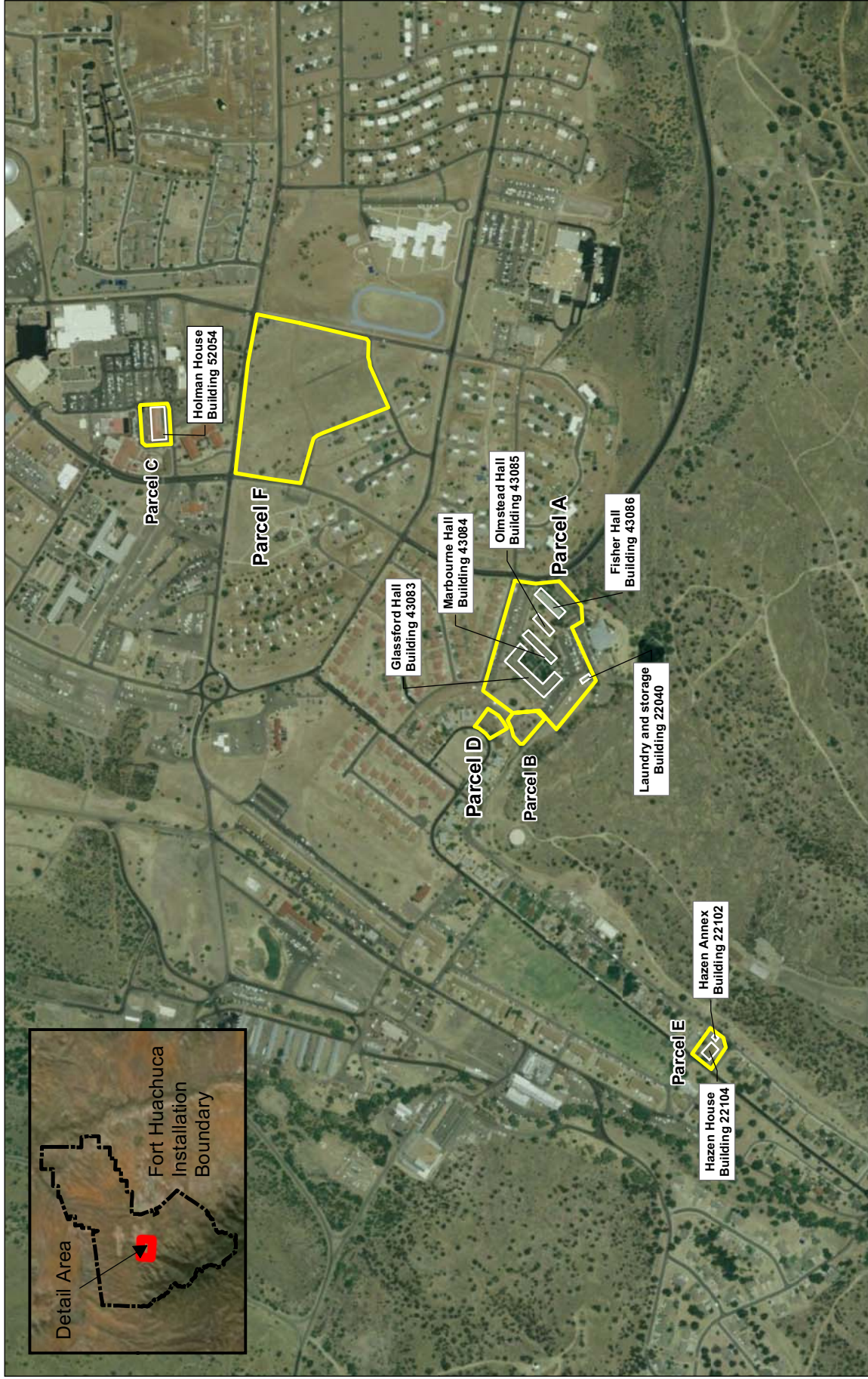
The following provides a description of each of the parcels containing existing lodging and the parcel of land being made available to Rest Easy for siting new lodging.

Parcel A. This parcel consists of Buildings 43083, 43084, 43085, 43086, and 22040. Buildings 43083 through 43086 were constructed between 1958 and 1974. The largest is Building 43083 with 155 rentable rooms, each equipped with microwave oven, sink, and small refrigerator. The adjacent buildings are of similar construction; Building 43084 has 39 rooms, Building 43085 has 23 rooms, and Building 43086 has 27 rooms. Two large parking areas serve the buildings, one to the northeast of the buildings and the other to the southwest. Building 22040 is used for linen pickup and delivery and storage of landscape maintenance and other lodging supplies. Although this building is within the footprint of the proposed action, it would not be conveyed to Rest Easy and would not be part of the proposed action. It would be identified in the lease as an excluded improvement.

Parcel B. This parcel consists of Building 22028 (Utah House), constructed in 1933 on approximately 0.8 acre to serve as family quarters. The building is rented as a whole house and designated as Distinguished Visitors Quarters. Parcel B, including Building 22028, would not be transferred to Rest Easy. It is included in this discussion only to provide an accurate reflection of the installation's current lodging unit inventory.

Parcel C. This parcel consists of Building 52054 (Holman House), constructed in 1971 on approximately 1.1 acres. The single-story brick building has 21 guest suites and a playground. Holman House is centrally located near the Post Exchange, chapel, fire station, and other services.

⁵ Building 22040 on Parcel A would not be transferred to Rest Easy. It is an excluded improvement. Therefore, it would not undergo renovation nor would it be demolished under this proposed action. It would be an excluded improvement.



Fort Huachuca Site Map

Fort Huachuca
Sierra Vista, Arizona

Figure 2-1



Parcel A Site Map

Fort Huachuca
Sierra Vista, Arizona

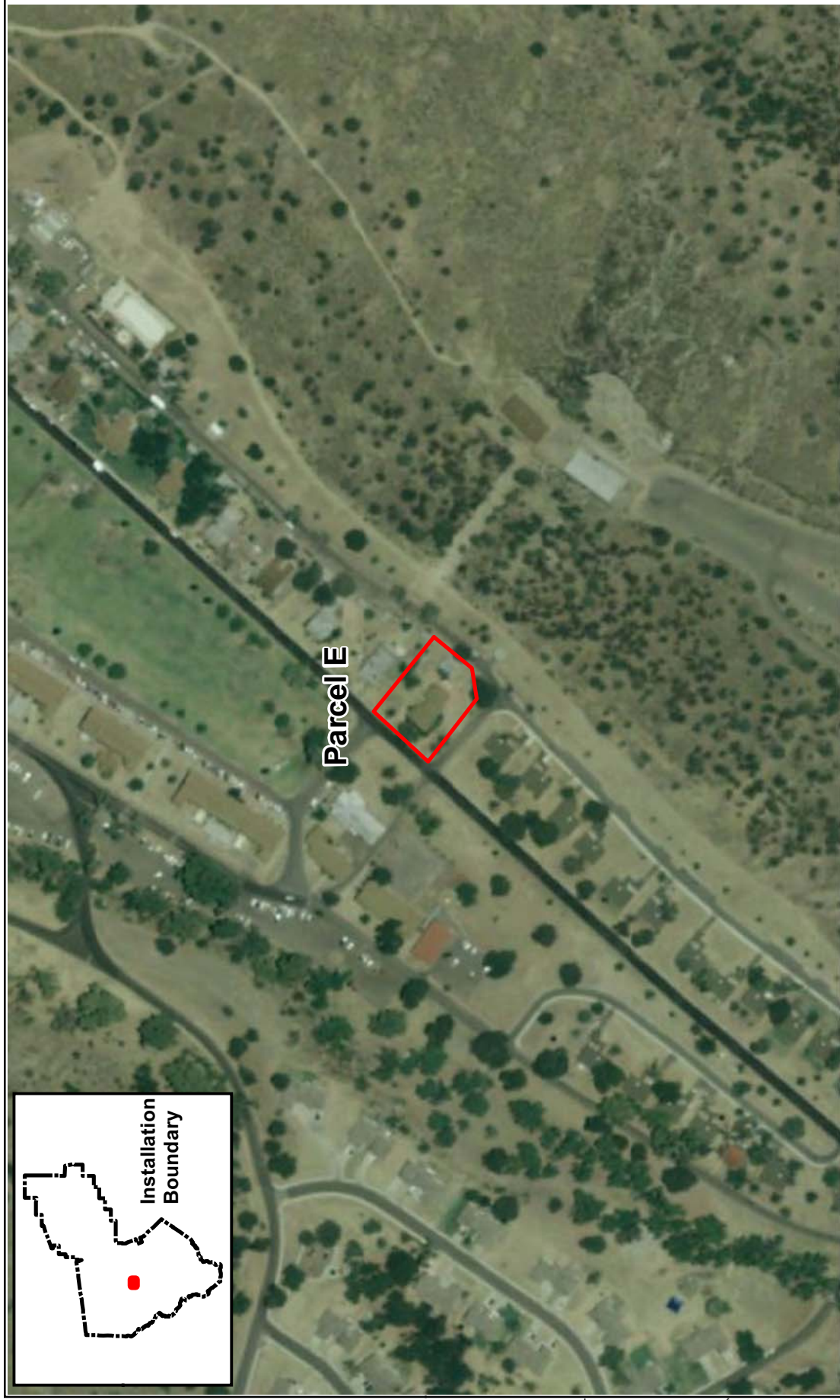
Figure 2-2



Parcel C Site Map

Fort Huachuca
Sierra Vista, Arizona

Figure 2-3



R:/New/18387/GIS/Layouts/PAL/Parcel E Site Map.mxd - 12/20/10 - YE

Parcel E Site Map

Fort Huachuca
Sierra Vista, Arizona

Figure 2-4



Parcel F Site Map

Fort Huachuca
Sierra Vista, Arizona

Figure 2-5



PARCEL A – GLASSFORD HALL (BUILDING 43083)



PARCEL C – HOLMAN HOUSE (BUILDING 52054)



PARCEL E - HAZEN ANNEX (BUILDING 22102)



PARCEL F - LOCATION OF THE NEW LODGING FACILITY

R:\new\24291\Core\Photos of Parcel.cdr - 02/16/11 - YE

Photos of the Parcels

Fort Huachuca
Sierra Vista, Arizona

Parcel D. This parcel consists of Building 42017 (Allen House), located at the southeastern end of Henry Circle and flanked by officer housing of similar construction. The two-story wood-framed building includes 12 suites, with an additional room converted for the housekeeping staff and a basement. A parking area is at the rear (southeast side) of the building. Parcel D, including Building 42017, would not be transferred to Rest Easy. It is included in this discussion only to provide an accurate reflection of the installation's current lodging unit inventory.

Parcel E. This parcel consists of Buildings 22102 and 22104 (Hazen House and Hazen Annex), built in 1891 as captain's quarters on approximately 0.5 acre. The two-story adobe Hazen House has six two-bedroom guest suites, four of which are designated as Distinguished Visitors Quarters. The Hazen Annex is a small building used for storage. Both structures are historic and contributing elements to the National Historic Landmark District commonly referred to as the Old Post area.

Parcel F. This parcel consists of 14.29 acres of undeveloped land. While the parcel currently has no structures or improvements, it was heavily developed in the past. In the 1940s, numerous buildings and tents occupied the parcel. More recently it was occupied by military family housing, which has since been removed. Parcel F is centrally located near the Post Exchange, chapel, fire station, and other services.

A 2003 Army Lodging Wellness report for Fort Huachuca evaluated the condition of these facilities and made the following recommendations for improvements (US Army 2003):

- Structural repairs (replacing roofs, windows, exterior and interior doors);
- Life safety upgrades (installing fire sprinkler and alarm systems);
- Utilities upgrades (replacing heating, ventilation, and air conditioning systems and hot water heaters, electrical and lighting system, and upgrading water and plumbing systems); and
- Interior décor improvements (replacing hard and soft goods in the guest rooms, replacing and repairing bath fixtures, light fixtures, and flooring).

The Army has also prepared an internal market demand review for the on-post lodging and has determined that Fort Huachuca will require additional rooms to meet the transient lodging demand driven by on-post institutional training requirements (US Army 2006).

2.3.2 Proposed Lodging Actions

The proposed action includes seven buildings on 11.53 acres within the Fort Huachuca cantonment area, and an unimproved 14.29-acre area (Parcel F) shown in Figure 2-5. Existing lodging at Fort Huachuca are located on Parcels A through E. Under the Preferred Alternative, lodging would be located on Parcels A, C, E, and F. Parcels B and D would not be conveyed to Rest Easy, and are not included in the Preferred Alternative.

Implementing the PAL program at Fort Huachuca would involve short-term hold (STH) and long-term hold (LTH) leases, a combination of renovation, demolition, and new construction actions as described in the following paragraphs and listed in Table 2-2. Upon conveyance and grants of leases noted in the following, Rest Easy would conduct all transient lodging operations as provided for in the lease. The total number of lodging units at Fort Huachuca under the Preferred Alternative would increase from 284 to 519 units over the long term, as described below.

Table 2-2
Fort Huachuca PAL Preferred Alternative

			Lodging units		
Parcel	Acres	Building(s)	Beginning state	End state	PAL action
Parcel A (Glassford Hall <i>et al.</i>) – STH					
	9.81	B43083	155	0	Minor renovations for STH and then demolish after new hotel goes into operation. Land would revert back to Army inventory at end of lease.
		B43084	39	0	
		B43085	23	0	
		B43086	27	0	
Parcel C (Holman House) – STH					
	1.06	B52054	21	0	Minor renovations for STH and then demolish after new hotel goes into operation. Land would revert back to Army inventory at end of lease
Parcel E (Hazen House and Hazen Annex) – STH					
	0.66	B22104	6	0	Renovate in accordance with historic property requirements and return to the Army after new hotel goes into operation.
		B22102	0	0	
Parcel F (New Build Site) – LTH					
	14.29	N/A	0	519	Build 519-room hotel.

Notes: STH = short-term hold; LTH = long-term hold; N/A = not applicable.

STH lease actions. The lodging and land in Parcels A, C, and E would be conveyed to Rest Easy under a short-term hold (5-year) lease. The existing lodging units on these parcels would undergo renovations and be used during the IDP to maintain an appropriate number of available rooms while the new lodging is being built. Renovations would include making the necessary life safety upgrades or modifications, as required by safety regulations; updating the interiors (e.g., linens and décor); adding some recreation facilities and improved public spaces for guests; and making exterior structural modifications associated with rebranding the buildings as part of the InterContinental Hotels Group. Structures eligible for the National Register for Historic Places (NRHP), Buildings 22104 and 22102 in Parcel E, would be renovated in strict accordance with the historic property requirements identified in the deed of conveyance and the Programmatic Agreement being executed for this proposed action between the Army, the Arizona State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation.

At the end of the IDP, or as the new hotel becomes operational, the buildings on Parcel E (22104 and 22102) and the underlying land would be revert back to Fort Huachuca. The buildings on Parcels A and C (43083, 43084, 43085, 43086, and 52054) would be demolished and the land would revert back to Fort Huachuca.

LTH Lease Actions and New Construction. The land in Parcel F (as shown in Figure 2-5) would be conveyed to Rest Easy under a 50-year lease. Rest Easy plans to replace the existing lodging infrastructure and address the deficit of available lodging units at Fort Huachuca by building a 519-room Candlewood Suites hotel and associated parking areas. The hotel would be up to four stories and may be one structure or multiple structures laid out in a campus setting. The hotel might include an exterior swimming pool approximately 25 by 45 feet and 5 feet deep.

2.4 ALTERNATIVE CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Sources of Lodging Services. The Army now provides transient lodging to Soldiers, their dependents, and other authorized patrons. Under this alternative, in lieu of privatizing the function, the Army could choose to discontinue all lodging operations on Army installations. This would require prospective lodging patrons to rely entirely on private-sector hotels and motels for their lodging. Currently, in many cases, lodging for personnel using unaccompanied personnel housing is located near their temporary duty site. Many of the current occupants of Army lodging are attending Army schools located on-post. Eliminating on-post lodging would lengthen the students' workdays because of commuting, increase their transportation costs (absent specific authorization, personnel on temporary duty are ineligible for rental vehicle reimbursement), and, in some instances, cause them to encounter shortages of lodging in adjacent communities. Local hospitality providers could experience wide swings in occupancy rates, especially between Army schools sessions. At Fort Huachuca, termination of the Army's lodging program would result in discontinuing lodging operations in 10 buildings that have a total of 284 lodging rooms. The combination of idling of the facilities until alternative uses could be determined and the time needed to achieve such alternative uses would contravene the Army's policy to manage its resources to optimal potential. For these reasons, this alternative is not feasible and is not evaluated in detail in this EA.

This page intentionally left blank.

SECTION 3.0

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 LAND USE

Land use refers to the human use of the land for various purposes, including economic production, institutional uses, and natural resource protection. Land use is frequently regulated by management plans, policies, zoning ordinances, and regulations that determine the types of uses allowable, or that protect specially designated or environmentally sensitive issues. For this environmental assessment, the region of influence (ROI) includes lands within and next to the project area that could be affected by the proposed action.

3.1.1 Affected Environment

3.1.1.1 Regional Geographic Setting and Location

Fort Huachuca is in Cochise County, Arizona, in the San Pedro River Valley, approximately 75 miles southeast of Tucson and eight miles north of the Mexican border. The post is flanked by the city of Sierra Vista and the San Pedro Riparian National Conservation Area (SPRNCA) to the east; Huachuca City to the north; and the Coronado National Forest to the southwest. The Huachuca Mountains border the installation on the south and west and the northern border parallels the Babocomari River, a tributary of the San Pedro River (US Army Garrison 2009).

Fort Huachuca encompasses 73,142 acres and is divided between the East Reservation, which totals 28,544 acres, and the West Reservation, which totals 44,598 acres near Arizona State Highway 90. The cantonment area is 5,014 acres and is in the West Reservation. All the parcels where the proposed action would be implemented are located within the cantonment area. The cantonment area provides a variety of housing and community support services, as well as administrative and operation directorates and training facilities. Major command headquarters are in the cantonment area, as are maintenance and storage facilities and facilities for research, development and testing, medical care, and training. No land use incompatibilities in or adjacent to the proposed PAL parcels are known to exist.

There are activities that occur at the installation that extend beyond the boundaries of Fort Huachuca and into the surrounding communities. These activities include uses of the restricted airspace and the electromagnetic environment that surrounds the installation. The restricted airspace extends beyond the installation boundaries and supports aviation missions associated with Fort Huachuca's Libby Army Airfield, which shares a runway with the Sierra Vista Municipal Airport (Vernadero Group 2009; Fort Huachuca 2010). The Buffalo Soldier Electronic Test Range covers 2,600 square miles and is critical to the tenants involved in electromagnetic spectrum research, development, and testing.

Recreation areas on Fort Huachuca include a golf course and driving range, equestrian area, skeet range, swimming pools, gymnasiums, recreation centers, parks, ball fields, and picnic areas. Hiking and biking trails are in nearby foothills and mountains.

3.1.2 Environmental Consequences

3.1.2.1 Preferred Alternative

No effects would be expected. Implementing the PAL program at Fort Huachuca would create no land use incompatibilities. The cantonment area, where the lodging would be located, includes housing and community support services, administrative areas, and other built-up areas. The

selection of Parcel F for the construction of transient lodging was carefully considered by the installation and determined to fit with their overall Master Plan. Surrounding land uses would not interfere with use of the proposed PAL sites for Army lodging, and use of the proposed parcels for lodging would not conflict with adjacent land use.

3.1.2.2 No Action Alternative

No effects would be expected under the No Action Alternative because no changes in land use would occur.

3.2 AESTHETICS AND VISUAL RESOURCES

This section discusses the visual resources of the environment in the ROI for the proposed action. The ROI for visual resources is defined as the areas within and immediately surrounding the project sites in the cantonment area. Potential effects on the aesthetics and visual are influenced by sensitive receptors, nearby residents and visitors, and vantage points involving project areas, as described below.

Fort Huachuca has a National Historic Landmark District (NHL) within the cantonment area. The Historic District, known as the Old Post area, provides a unique visual resource. It is situated a little less than one half mile to the southwest of Parcel F and fewer than 500 feet to the west of Parcel A. The buildings that comprise the Historic District and surrounding viewshed are managed in an attempt to maintain historic integrity. Any actions that could affect the Historic District and viewshed must be coordinated with the Arizona State Historic Preservation Officer. As such, the potential for effects on the Historic District viewshed are addressed in Section 3.8 Cultural Resources, rather than in this section.

3.2.1 Affected Environment

The ROI is within the cantonment area of the West Reservation. The developed areas on the installation include the cantonment area and Libby Army Airfield. These areas occupy 5,014 acres collectively, or approximately eight percent of the installation. Both are on the eastern edge of the West Reservation (US Army 2009).

More than 1,889 buildings are in the cantonment area. Here and in other built areas, land management and maintenance fall under the direction of the Fort Huachuca Directorate of Public Works (US Army 2009).

Parcels A, C, E, and F are scattered across approximately one mile in the southwestern portion of the cantonment area. The four parcels where the Preferred Alternative would be implemented and areas immediately surrounding the parcels comprise the ROI.

The buildings located on Parcel A are flanked by parking lots. Grass, bushes, shrubs, and trees surround the buildings. The terrain is flat and mostly developed. The lodgings buildings were built between 1956 and 1974 and contain 244 lodging units. The buildings are primary sources of artificial light.

Building 52024 is centrally located on Parcel C. Grass, shrubs, and trees are on one side of the building, which is flanked by parking lots and paved areas. The terrain is flat and developed. The building, which was built between 1971 and 1972, is the primary source of artificial light and contains 21 units for lodging.

Buildings 22104 and 22102 are on opposite sides of Parcel E. Grass and trees separate the buildings, which were built in 1891. The terrain is flat, and the buildings are the primary source of artificial light. Six units are in one building, and no lodging units are in the other.

The 14.29-acre Parcel F is vacant. The terrain is flat, and minimal landscaping of grass, bushes, and trees covers the parcel. There are no sources of artificial light.

The visual aesthetic of the areas immediately surrounding the parcels are similar to the parcels themselves. They are either used for residential housing or are vacant. Some of the uses near Parcels C and F are commercial, and a school is located near Parcel F.

Similar to the four parcels, the natural landscape of the areas immediately surrounding the parcels has been disturbed by cantonment activities. Vegetation is sparse and is primarily shades of tan and green, similar to the color of vegetation on the four parcels. Views from the four parcels are of the areas immediately surrounding the parcels. Beyond these areas are distant views of foothills and mountains with approximately 5,000 feet of relief. During the dry season, the tan terrain of the hillsides is covered with dark green trees and lighter green grasses and bushes. During the wet season, the terrain becomes much greener in all areas. Fire fighting trails are also visible across the hillsides. None of the PAL parcels can be seen from off-post.

Various guidelines and requirements affect the aesthetics and visual resources of the project area to ensure that buildings and structures are uniform in construction and conform to the overall aesthetics of the area. Guidelines and requirements address the design, construction, and maintenance of structures and facilities; the protection and preservation of natural flora and fauna; and the maintenance of landscaping. Installation guidelines and requirements affecting the project areas include the Installation Design Guide; and the Integrated Cultural Resource Management Plan (SWCA Environmental Consultants 2009).

3.2.2 Environmental Consequences

An action is considered to have an adverse aesthetics and visual resources impact if it were to:

- Include structures or land alterations visually incompatible or obtrusive to the existing visual setting and landscape;
- Noticeably increase visual contrast and reduce the scenic quality rating from any high-sensitivity foreground or middle ground viewpoint;
- Block or disrupt existing views or reduce public opportunities to view scenic resources; or
- Conflict with existing regulations and policies governing aesthetics and visual resources.

3.2.2.1 Preferred Alternative

During renovation, construction, and demolition, there would be short-term minor adverse impacts on aesthetics and visual resources. Impacts would include a visible increase in traffic from project vehicles and an increase in activity and equipment. These adverse impacts on the aesthetics and visual resources of the ROI would be short-term because they would be limited to the duration of renovation, construction, and demolition.

The Preferred Alternative would be subject to design, construction, and maintenance guidelines and requirements for project structures, facilities, and landscaping. Improving the appearance of buildings and landscaping would enhance the appearance of the built environment and the natural landscape. Additionally, the demolition of the existing structures on Parcels A and C, and the reseeded of the land would create more open views in those areas. All of these actions would result in long-term minor beneficial effects.

Once hotel construction is finished, a new four-story, 519-room hotel and parking lots would occupy the much of the now vacant Parcel F. Although the new building would replace aging lodging structures on Parcels A and C, it would also be taller than the housing on Parcels A and C, which are only one-, two-, and three-story buildings. Due to its height and size, the new building would create a new point of focus in the cantonment area and could partially obstruct views of the surrounding hills from some vantage points. The hotel would also be visible from the nearby family housing. The hotel could be considered visually intrusive by some receptors resulting in long-term adverse impacts. The proposed project would be subject to design, construction, and maintenance guidelines and requirements for project structures, facilities, and landscaping. Because this type of development is not atypical for this area, the long-term effect would be considered minor.

The potential for effects on the Historic District viewshed is addressed in Section 3.8 Cultural Resources.

Due to its size, the new building is assumed to have more artificial lighting than the existing buildings. The increase in lighting would be a noticeable new source of nighttime light and glare, resulting in minor long-term adverse impacts. The closest on-post facilities from which the new building would be visible are next to the site. Nighttime light would be visible from these areas, as well as areas farther away. The degree of adverse impacts would vary, depending on screening objects, such as trees, and viewer sensitivity. This level of lighting is not atypical for this designated use and would not be significant. Nevertheless, to minimize long-term impacts from lighting, Rest Easy would use proper outdoor lighting design features, such as shrouding outdoor lights to keep stray light from illuminating areas unnecessarily and equipping outdoor lights with motion detectors, where practical, to provide light only when necessary. Further, Rest Easy would comply with the requirements of the dark skies ordinance, which aims at reducing streetlights to make stargazing easier. Also, exterior windows would be tinted to reduce the visibility of interior lights from outside. This would have the added benefit of reducing the transmission of heat through windows, thereby increasing energy efficiency.

Rest Easy would replace any vegetation damaged or removed during renovation, construction, and demolition with vegetation appropriate for the site. All new landscaping would comply with the Fort Huachuca Approved Plant List. This would maintain the visual aesthetic of landscaping in the project area.

3.2.2.2 No Action Alternative

Under the No Action Alternative, conditions affecting aesthetics and visual resources would remain approximately as they are under existing conditions. As such, no effects on aesthetics and visual resources are expected.

3.3 AIR QUALITY

3.3.1 Affected Environment

Cochise County, and therefore Fort Huachuca, is in the Southeast Arizona Intrastate Air Quality Control Region (AQCR 12). The Environmental Protection Agency (USEPA) has designated most of AQCR 12, including Fort Huachuca, as an attainment area for all criteria pollutants (USEPA 2010a, 2010b). Notably, the community of Paul Spur, Arizona, approximately 40 miles to the southeast, is a moderate nonattainment area for particulate matter.

Fort Huachuca was granted a synthetic minor air-operating permit from the Arizona Department of Environmental Quality (ADEQ) for operating its boilers, water and space heaters, and internal

combustion engines (ADEQ 2010). The permit was granted in May 2006 and expires in May 2011. To ensure emissions remain below the major source threshold, Fort Huachuca has accepted federally enforceable limitation on the operation of its boilers and generators. Boilers and heaters can burn only natural gas, fuel consumption on all boilers cannot exceed 40 percent of their rated capacities, and standby generators are limited to 250 operating hours per year. Fort Huachuca's 2009 installation-wide air emissions are tabulated below.

Table 3-1
2009 Annual Emission at Fort Huachuca

Pollutant	Emissions (tons/year)
Volatile organic compounds (VOCs)	3.9
Nitrogen oxides (NO _x)	9.3
Carbon monoxide (CO)	6.9
Sulfur dioxide (SO ₂)	0.2
Particulate Matter Less Than 10 Microns (PM ₁₀)	0.5

Source: US Army 2010a

Greenhouse Gases and Global Warming. Greenhouse gases (GHGs) are components of the atmosphere that trap heat relatively near the surface of the earth and therefore contribute to the greenhouse effect and global warming. Most GHGs occur naturally in the atmosphere, but increases in their concentration result from human activities, such as burning fossil fuels. Global temperatures are expected to continue to rise as human activities continue to add carbon dioxide (CO₂), methane, nitrous oxide, and other heat-trapping gases to the atmosphere. Whether rainfall will increase or decrease remains difficult to project for specific regions (USEPA 2010c; IPCC 2007).

EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance, outlines policies intended to ensure that federal agencies evaluate climate change risks and vulnerabilities and to manage the short- and long-term effects of climate change on their operations and missions. The EO specifically requires the Army to measure, report, and reduce its GHG emissions from both direct and indirect activities. The Department of Defense (DOD) has committed to reducing GHG emissions from noncombat activities 34 percent by 2020 (DOD 2010). In addition, the CEQ recently released draft guidance on when and how federal agencies should consider GHG emissions and climate change in NEPA analyses. The draft guidance includes a presumptive effects threshold of 27,563 tons per year (25,000 metric tons per year) of CO₂ equivalent emissions from a federal action (CEQ 2010).

3.3.2 Environmental Consequences

3.3.2.1 Preferred Alternative

The USEPA has designated most of AQCR 12, including Fort Huachuca, as an attainment area for all criteria pollutants (USEPA 2010a, 2010b), so an applicability analysis and formal conformity demonstration under the General Conformity Rule (40 CFR, 81.272) for the PAL Preferred Alternative would not be required. The Record of Non applicability is included in Appendix A.

Short- and long-term minor adverse effects would be expected. Implementation of the Preferred Alternative could affect air quality through airborne dust and other pollutants generated during construction and by the introduction of new stationary sources of pollutants, such as heating boilers. Air quality impacts would be considered minor unless the anticipated emissions would be greater than the General Conformity Rule applicability threshold, would exceed the GHG

threshold in the draft CEQ guidance, or would contribute to a violation of any federal, state, or local air regulation.

Construction emissions were estimated for fugitive dust, on- and off-road diesel equipment and vehicles, worker trips, architectural coatings, and paving off-gasses. Operational emissions would primarily be due to heating emissions for the buildings and vehicle trips to and from the buildings. The estimated emissions from the Preferred Alternative would be below the General Conformity Rule applicability thresholds (Table 3-2). These effects would be minor.

Table 3-2
Annual Air Emissions Compared to Applicability Thresholds

Activity	Emissions (tons/year)						De Minimis Threshold	Would Emissions Equal/Exceed De Minimis Levels?
	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}		
Construction	10.9	10.3	2.8	<0.1	11.2	1.4	100	No
Operations	15.8	3.0	1.7	<0.1	0.2	0.2		

For analysis purposes, it was assumed that all the construction would be compressed into a single 12-month period. Therefore, regardless of the ultimate implementation schedule, annual emissions would be less than those shown herein. Small changes in the siting of these facilities, the ultimate design, and moderate changes in the quantity and types of equipment used would not have a substantial influence on the emission estimates and would not change the level of effects under NEPA.

The new hotel facility would be equipped with individual furnaces or boilers for heating. These stationary sources of air emissions could be subject to federal and state air permitting regulations, including New Source Review, Prevention of Significant Deterioration, National Emission Standards for Hazardous Air Pollutants, or New Source Performance Standards. The lodging facilities would be owned, operated, and maintained by Rest Easy on property leased from Fort Huachuca. In general, leased activities would not be considered under the direct control of Fort Huachuca. These leased activities would normally be considered “tenants,” and Rest Easy would need to perform an air quality regulatory analysis to determine if any Clean Air Act permitting is required for operating any sources of air emissions. The Arizona Administrative Code for Air Quality Control does outline precautions that would be required during the construction of the new facilities (AAC Title 18, Chapter 2-8-240 Particulate Matter Emissions). All persons responsible for any operation, process, handling, transportation, or storage facility, which could result in fugitive dust, would take reasonable precautions to prevent such dust from becoming airborne. Reasonable precautions might include the use of water to control dust from building demolition, construction, road grading, or land clearing. Therefore, implementation of the Preferred Alternative would result in minor air quality effects.

Greenhouse Gases and Global Warming. Under the Preferred Alternative, all construction activities combined would generate approximately 1,398 tons (1,268 metric tons) of CO₂. The increase in GHGs from the additional lodging units would be minor, and with the use of modern building techniques, operational activities may ultimately reduce GHG emissions. Regardless, the GHG emissions associated with the Preferred Alternative fall well below the CEQ threshold of 27,563 tons per year (25,000 metric tons per year) of CO₂ equivalent emissions.

3.3.2.2 No Action Alternative

Under the No Action Alternative, no construction or changes in military operations at Fort Huachuca would occur. Ambient air quality conditions would remain as described in Section 3.3.1.

3.4 NOISE

3.4.1 Affected Environment

The primary sources of noise at Fort Huachuca are the operation of the Army airfield, civilian and military vehicles, unmanned aerial vehicle use, military training activities, landscape equipment, aircraft overflights, construction activities, and vehicle maintenance operations. The DOD uses guidelines developed by the Federal Interagency Committee on Urban Noise (FICUN) to evaluate whether existing and proposed land uses are compatible with prevailing noise levels. The FICUN guidelines (FICUN 1980) address land use incompatibility and recommended building design considerations according to three noise level categories:

- Zone I = Day-night average sound levels (DNL) below 65 A-weighted decibel scale (dBA);
- Zone II = DNL levels of 65 to 75 dBA; and
- Zone III = DNL levels above 75 dBA.

All land uses are considered generally compatible with Zone I noise levels. Educational and residential land uses generally are not compatible with Zone II noise levels, unless special acoustic treatments and designs are used to ensure acceptable interior noise levels. Residential and educational land uses are not compatible with Zone III noise levels. Industrial and manufacturing land uses may be acceptable in Zone III areas if special building designs and other measures are implemented.

3.4.2 Environmental Consequences

3.4.2.1 Preferred Alternative

Short-term minor adverse noise effects would be expected. Short-term increases in noise would result from the use of construction equipment. Construction noise would be present only during the construction phases of the project and would be limited to normal weekday business hours to the extent practicable. The closest noise-sensitive areas are General Myers School and the University of Phoenix within approximately 700 feet and 2,000 feet from Parcel F, respectively. Given the temporary nature of the proposed construction and the limited amount of noise that construction equipment would generate, short-term noise impacts would be minor.

All parcels would be in Noise Zone I and would be completely compatible with the intended use, as described in Section 3.4.1 (USACHPPM 1997). No use of weaponry, demolitions, or aircraft operations would occur as part of the implementation of the Preferred Alternative. Therefore, no changes in the existing noise zones associated with these sources would be expected, and long-term noise effects would be negligible.

3.4.2.2 No Action Alternative

No effects on the ambient noise environment would be expected. Under the No Action Alternative, no construction or changes in operations at Fort Huachuca would occur. Ambient noise conditions would remain as described in Section 3.4.1.

3.5 GEOLOGY AND SOILS

The ROI consists of the Fort Huachuca area. This resource includes the underlying geologic formations, topography, regional faults, seismic hazards, and soils and sediments.

3.5.1 Affected Environment

Fort Huachuca is in the Mexican highland section of the Basin and Range Physiographic Province. The landscape consists of isolated mountain ranges and broad, relatively flat valleys or basins. Elevations at Fort Huachuca range from approximately 3,925 feet above mean sea level (amsl) in the northeast corner of the East Reservation near the San Pedro River to about 8,625 feet amsl at the crest of Sheelite Canyon in the Huachuca Mountains. Within the cantonment area the elevation is approximately 5,050 feet (USAGFH 2004).

Fort Huachuca includes the northeastern portion of the Huachuca Mountains and part of the Upper San Pedro River Valley. The fault-block Huachuca Mountains trend northwest-southeast and are composed primarily of Precambrian granite and Jurassic volcanic (USAGFH 2004).

The unconsolidated and semiconsolidated sediments of the Upper San Pedro River Basin (USPB) consist of three layers. The lowest unit is a thick cemented conglomerate (Pantano Formation) that is overlain by the lower basin fill unit, composed of weakly to strongly cemented layers of interbedded sandy clay, silty sand, and sandy gravel. This layer is approximately 235 feet thick in the Fort Huachuca well field. The upper basin fill unit in the vicinity of Fort Huachuca consists of very permeable, flat-lying layers of weakly compacted clay, gravel, sand, and silt of middle to late Pleistocene age that is approximately 650 feet thick (USAGFH 2004).

When combined, the upper and lower basin fill units form the USPB's principal ground water reservoir. The floodplain alluvium overlying the upper basin fill in the San Pedro River Valley is composed of highly permeable unconsolidated gravel, sand, and silt. Although limited in extent, the alluvium seems to play an important role in sustaining the flow of the Upper San Pedro River (USAGFH 2004).

3.5.1.1 Soils

Fort Huachuca has a diverse assortment of soil types. This diversity is directly related to differences in climate, parent material, and topography at the installation. The soils exhibit wide variations in depth, texture, and chemical properties. Roughly 30 percent of the soils are less than two feet deep over bedrock. Many soils in the hilly and mountainous areas, particularly on the South and West Ranges, are shallow, with steep slopes; these soils tend to have a low available water capacity and are susceptible to erosion. The high sodium and gypsum contents of many soils on the East Range make these soils subject to gully erosion and piping; they also are very corrosive to concrete and steel. The soil of the cantonment area consists of alluvial fan soils. Almost one-quarter of the post land area has deep red clay soils that have slow permeability and tend to be poorly drained. They become very slippery when wet and are susceptible to compaction. Other properties of soils on the installation influencing land use and management are gravelly or rocky soils, soils with hard pans, and deep, droughty, sandy soils (USAGFH 2004).

3.5.1.2 Prime Farmland

Prime farmland soils are protected under the Farmland Protection Policy Act (FPPA) of 1981. The intent of the FPPA is to minimize the extent to which federal programs contribute to the unnecessary or irreversible conversion of farmland soils to nonagricultural uses. The FPPA also ensures that federal programs are administered in a manner that, to the extent practicable, will be compatible with private, state, and local government programs and policies to protect farmland.

The Natural Resources Conservation Service (NRCS) is responsible for overseeing compliance with the FPPA and has developed the rules and regulations for implementing the act (Title 7 of the CFR, Part 658, revised January 1, 1998).

According to the FPPA, “Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides and labor, and without intolerable soil erosion. Prime farmland includes land that possesses the above characteristics but is being used currently to produce livestock and timber. It does not include land already in or committed to urban development or water storage.”

None of the land within or adjacent to the PAL parcels is considered prime farmland soils. Soils in the undeveloped area (Parcel F) are classified as Terrarossa complex, which is not rated prime farmland (NRCS 2010); therefore, a Farmland Conversion Impact Rating (Form AD-1006) of the project area is not warranted, and no further action is required under the FPPA.

3.5.2 Environmental Consequences

3.5.2.1 Preferred Alternative

No effects on geology or prime farmland would occur from implementation of the Preferred Alternative. However, short-term minor adverse effects on soils would be expected. Soil disturbance and possibly some soil erosion would occur during construction. However, these effects would be minimized by the use of appropriate best management practices (BMPs) for controlling runoff, erosion, and sedimentation. Rest Easy would be required to prepare and abide by a stormwater pollution prevention plan (SWPPP) and to abide by all regulations, including those pertaining to sediment retention and soil stabilization.

3.5.2.2 No Action Alternative

No effects on geology or soils are expected and no ground-disturbing activities would occur under the No Action Alternative.

3.6 WATER RESOURCES

This section discusses the water resources of the ROI for the proposed action. The ROI for water resources includes the PAL footprint, and lands where there are surface waters and where ground water recharges and discharges. The ROI for this analysis includes relevant river basins. Potable water is addressed in Section 3.11, Utilities.

3.6.1 Affected Environment

Precipitation. Precipitation mainly occurs during two periods of the year. The first period is between July and October, when Gulf of Mexico atmospheric moisture falls as afternoon and evening thundershowers. The other period is during winter, when Pacific frontal storms reach the area and can produce several days of gentle rains in the valley and snow on the surrounding mountains. The snow is an insignificant contribution to annual precipitation totals, although it may be visible on the mountains for several days to several months. The Huachuca Mountains receive an average annual precipitation exceeding 30 inches per year; the valley average is about 15 inches per year (US Army 2009).

Surface Water. Fort Huachuca is within the Sierra Vista subwatershed of the USBP (US Geological Survey Cataloging Unit: 15050202). The headwaters of the San Pedro River are in Mexico. The river flows north through Arizona for approximately 100 miles before converging

with the Gila River. The SPRNCA encompasses approximately 40 miles of the Upper San Pedro River. To the north of Fort Huachuca is the Babocomari River, which sustains a perennial flow in two reaches, totaling 12 miles. This river drains the Mustang Mountains, Canelo Hills, and the north end of the Huachuca Mountains and carries this water to its confluence with the San Pedro River (Vernadero Group 2009).

Most of the surface water features on Fort Huachuca are ephemeral streams that consist of dry washes, arroyos, or continuous and discontinuous gullies. Ephemeral streams are usually dry and flow only in response to precipitation that is significant enough to achieve runoff conditions. Ephemeral streams on Fort Huachuca are typically narrow channels with a sand and gravel layer at the bottom of the channel. Some of these channels are deeply entrenched. The channels serve to carry runoff to larger drainage systems (Vernadero Group 2009).

Fort Huachuca has approximately 4.5 miles of perennial streams, 3.5 miles of which occur in Garden Canyon and another 0.75 mile in Huachuca Canyon. Minor lengths of perennial reaches also occur in McClure and Blacktail Canyons. In addition, there are 16 ponds covering approximately 32 acres on Fort Huachuca. The perennial streams are typically fed by one or more of the Fort Huachuca's 39 springs. Most of the ponds are dry and retain water only during heavy rains. No surface water is used to meet Fort Huachuca's water needs (Vernadero Group 2009).

The alluvial fans south of the Babocomari River Valley within the West Range are dissected by three major drainages: Blacktail Canyon, Slaughterhouse Canyon, and Huachuca Canyon. Within the East Range, the primary drainage is Soldier Creek. These drainages are intermittent and flow in response to rainfall. Huachuca Canyon Creek serves as a major stormwater interceptor for Huachuca Canyon and Fort Huachuca's cantonment area (Vernadero Group 2009).

The PAL parcels are relatively flat, with no natural sources of water. Where necessary, stormwater is directed toward the stormwater system.

Ground water. The Arizona Department of Water Resources has divided the USPB into subwatersheds to better define and manage available water resources. Fort Huachuca, Sierra Vista, and most of the SPRNCA occur within the Sierra Vista subwatershed. The limits of the subwatershed are the International Border on the south, the Huachuca and Mustang Mountains on the west, Mule Mountains on the east, and State Route 82 on the north.

Two aquifers provide ground water within the USPB, the regional and the floodplain aquifers. The regional aquifer is within the upper and lower basin fill and to a lesser extent the Pantano Formation. The floodplain aquifer is within the lower basin-fill unit. The floodplain aquifer is generally recharged by stormwater runoff and discharge from the regional aquifer. In some reaches of the San Pedro River, recharge occurs through the stream channel. Agricultural return flows and underflow across the International Border may also recharge the alluvial aquifer (Vernadero Group 2009).

Ground water within the USPB is potable, and wells within the basin meet all the water needs of the communities within the basin, including Fort Huachuca, which has the potential to impact ground water surface levels and surface water levels on the San Pedro River and the associated riparian habitat this system supports. To reduce the impacts of regional ground water withdrawal, Fort Huachuca has implemented a broad spectrum of water conservation, recharge, and reuse measures (Vernadero Group 2009).

Artificial aquifer recharge is one component of this conservation program. More efficient water use is also occurring both at Fort Huachuca and in the surrounding communities. Measures that Fort Huachuca has implemented to accomplish water efficiency and savings include fixture

upgrades (e.g., replacing high water use plumbing fixtures with low water use fixtures), facility infrastructure removal/consolidation (e.g., demolishing facilities), aggressive leak detection and repair, water conservation education, xeriscaping,⁶ including the use of artificial turf and replacing turf areas with gravel and implementing a strict landscape watering policy in the military family housing area (Vernadero Group 2009).

Fort Huachuca has entered into agreements and partnerships with other groups and agencies to reduce water use in the USPB. Agricultural pumping has decreased as a result of the retirement of agriculture associated with creation of the SPRNCA and through the purchase of conservation easements by Fort Huachuca in partnership with The Nature Conservancy. In addition, Fort Huachuca is an active member of the Upper San Pedro Partnership; a consortium of 21 agencies that collaborates to meet water needs in the region, while protecting the San Pedro River (Vernadero Group 2009).

Floodplains. Floodplains within Fort Huachuca are not represented on Federal Emergency Management Agency maps. However, available data indicate that a network of floodplains surrounds the main developed area within the cantonment area. Most of the floodplains are in open space, training areas, or recreation areas. However, as many as 80 buildings on Fort Huachuca could be located within a floodplain. The real property master plan identifies the need for an updated study and delineation of floodplains so that appropriate avoidance and mitigation measures can be taken to prevent issues with developing the land within the floodplain (Vernadero Group 2009).

EO 11988, Floodplain Management, was established in 1977 “to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” All federal and federally supported activities are required to comply with EO 11988.

3.6.2 Environmental Consequences

The proposed action would have an adverse effect on resources if it were to:

- Degrade surface or ground water quality in a manner that would reduce the existing or potential beneficial uses of the water;
- Alter the existing pattern of surface water or ground water flow or drainage in a manner that would adversely affect the uses of the water within or outside the project region;
- Be out of compliance with existing or proposed water quality standards or with other regulatory requirements related to protecting or managing water resources; or
- Increase the potential for flooding or the amount of damage that could result from flooding.
- Increase ground water extraction for human use and/or irrigation

3.6.2.1 Preferred Alternative

Short-minor adverse impacts on water resources are expected as a result of the Preferred Alternative, while any long-term effects would be negligible. Renovation of buildings on Parcels

⁶Xeriscaping refers to landscaping and gardening in ways that reduce or eliminate the need for supplemental water from irrigation.

A, C, and E would not involve ground disturbances or activities that would affect water resources because renovation would mostly occur inside the buildings. Following the demolition of the existing structures on Parcels A and C and revegetation of those areas, a slight decrease in stormwater runoff could occur as a result of the decrease in impervious surface. Similarly, ground water recharge could slightly increase as the amount of impervious surface decreases. However, this slight increase may be temporarily offset from dust suppression efforts during building demolition and hotel construction if ground water is used.

Conversely, minor increases in stormwater runoff would occur as a result of an increase in impervious area at the proposed hotel site. The new hotel would be designed to ensure that stormwater is conveyed away from structures and directed to flumes, pipe systems, or stormwater retention areas. Rest Easy would offset potential increases in runoff associated with the new hotel by improvements in on-site stormwater capture and collection infrastructure.

During construction of the hotel, there would be an increased potential for surface water quality degradation due to silt runoff from disturbed areas at the construction site. Impacts on water quality would be short term and minor. Because the proposed construction activities would involve an area bigger than one acre, Rest Easy would comply with USEPA stormwater discharge requirements under the National Pollution Discharge Elimination System by obtaining a stormwater discharge permit. This involves preparing a site-specific SWPPP, which would include an erosion and sediment control plan. Erosion control measures used during construction are expected to prevent water quality degradation from stormwater runoff. The new hotel would be designed to respect the natural systems of topography and drainage.

A decrease in ground water recharge from the increase in impervious area is expected to be very minor. Water not directed toward a stormwater system would be directed toward stormwater retention areas, where it could percolate into the ground.

Potable groundwater use in the cantonment area would be expected to increase because of the increase of 235 lodging units from the proposed hotel. However, there would be a zero net change in groundwater use from the Sierra Vista subwatershed regional aquifer specifically related to the additional lodging units because only the physical location of the water use would change, not overall consumption, as lodging demand moves from the surrounding communities to Fort Huachuca. Rest Easy would operate and maintain the lodging facilities in accordance with current and future water conservation policies implemented at Fort Huachuca, as well as all applicable federal, state, and local regulations; policies; and agreements pertaining to water usage as outlined in the Environmental Management Plan. Rest Easy would strictly adhere to the plan and any environmental lease provisions regarding water usage in accordance with the Exhibit E of the ground lease. Rest Easy would work with Fort Huachuca to ensure that the final facility design and landscaping plan adequately incorporates water efficiency measures and site design features such as stormwater retention areas that allow surface water to infiltrate to the aquifer to help offset the increase in groundwater consumption on the installation. Any costs associated with water consumption for the project would be addressed in the Municipal Services Agreement between Fort Huachuca and Rest Easy. Floodplains within Fort Huachuca are not represented on Federal Emergency Management Agency maps, but available data indicate that a network of floodplains surrounds the main developed area within the cantonment area. Before construction begins, Rest Easy would confirm that the construction site is not within a floodplain. No construction would be allowed within a floodplain.

3.6.2.2 No Action Alternative

Under the No Action Alternative, conditions affecting water quality and drainage would remain approximately as they are under existing conditions. Because existing buildings at the project areas would remain in use and no large-scale ground-disturbing activities would occur, no effects on water resources would be expected.

3.7 BIOLOGICAL RESOURCES

3.7.1 Affected Environment

Most of the proposed PAL parcels are developed and are surrounded by buildings, roads, and infrastructure. The area surrounding the buildings are composed of manicured grasses and scattered small trees. The undeveloped Parcel F is composed of grasses and scattered small trees. Overall, the parcels provide marginal habitat for wildlife species that tolerate human presence, noise, and altered human habitats, such as gopher snakes (*Pituophis catenifer*), black-tailed jackrabbit (*Lepus californicus*), and raccoon (*Procyon lotor*). Common bird species adapted to human environments, such as Mexican jay (*Aphelocoma ultramarina*), warbling vireo (*Vireo gilvus*), and vermilion flycatcher (*Pyrocephalus rubinus*), could nest in the scattered trees on-site. The Migratory Bird Treaty Act protects these species. No wetlands are present on any of the PAL parcels. Further, while the Army has endangered species management plans for the lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*) and the Huachuca water umbel (*Lilaeopsis schaffneriana* ssp. *recurva*), no federally or state-listed species are known to exist in the vicinity of the PAL parcels. The PAL parcels do not provide suitable habitat for any listed species, and no critical habitat for listed species is found on or near the parcels.

3.7.2 Environmental Consequences

3.7.2.1 Preferred Alternative

Short-term minor adverse effects would be expected. The Preferred Alternative would involve ground disturbing activities and vegetation removal in Parcel F for construction of the new hotel, and demolition of the existing lodging in Parcels A and C at the end of the IDP. All of the PAL parcels are within the highly disturbed cantonment area, which provides poor habitat for biological resources. The project could temporarily displace common wildlife species during construction but would not affect natural or important wildlife habitats. No federally or state-listed species or potential listed species' habitat would be affected by the Preferred Alternative. In addition, the Preferred Alternative would affect no wetlands or critical habitat.

Construction could disturb nesting birds protected by the Migratory Bird Treaty Act, and construction, particularly on Parcel F, could remove trees in which birds are nesting. Construction and development activities would be closely monitored from March 1 to August 31 to avoid adverse effects on breeding migratory birds. Parcels where vegetation could be disturbed by construction or demolition activities would be surveyed for nesting migratory birds prior to vegetation disturbance. The Fort Huachuca Environmental Office would evaluate the survey results and coordinate with Rest Easy representatives to ensure construction activities would not have an adverse effect on migratory birds.

3.7.2.2 No Action Alternative

No effects on biological resources are expected under the No Action Alternative. No vegetation, wildlife, or special status species would be disturbed.

3.8 CULTURAL RESOURCES

3.8.1 Affected Environment

The following section is a discussion of the affected environment of cultural resources for the proposed action. Cultural resources are historic properties (buildings, structures, districts, landscapes, and viewsheds as defined by the National Historic Preservation Act [NHPA]), Native American sites, archaeological sites, districts, and objects that are eligible for or listed on the NRHP; cultural items, as defined in the Native American Graves Protection and Repatriation Act of 1990; Native American sites for which access is protected under the American Indian Religious Freedom Act of 1978; archaeological resources, as defined by the Archaeological Resources Protection Act of 1979 and Antiquities Act of 1906; Army Regulation 200-4; and archaeological artifact collections and associated records, as defined by 36 CFR Part 79. As such, the ROI for the proposed action includes the project footprint, project depths, and adjacent properties.

3.8.1.1 Archaeological Resources

Prehistoric as well as historic-era archaeological resources have been identified at Fort Huachuca. The earliest in the San Pedro Valley date to the Paleo-Indian Period (9500-6500 B.C), although only one isolated artifact from this period has been identified at Fort Huachuca. Archaeological resources that have been identified within the cantonment area have consisted primarily of historic-era deposits. No archaeological resources have been recorded within the ROI for the proposed project, but based on survey coverage depicted in the Integrated Cultural Resources Management Plan (ICRMP), the ROI has not been previously surveyed due to the development of the cantonment area that occurred during World War II. Parcel F is currently vacant, but was developed and heavily disturbed in the past. As a result, the potential for intact archaeological resources is extremely low and surveying for such archaeological evidence is not required. The nearest sites are approximately 0.6 mile from the ROI and include an Apache Scout Camp (AZ EE:7:115 ASM), a historic-era trash dump (AZ EE:7:148 ASM), and a historic-era site with foundations and trash (AZ EE:7:151ASM) (Tagg 2010a).

Fort Huachuca had an ICRMP prepared in 2007 and revised in 2008, in compliance with the Army Pamphlet 200-4 for the ICRMP outline (SWCA 2009). The ICRMP provides a prehistoric and historic setting of the base as well as a framework for complying with historic preservation regulations, identifying cultural resources, and managing cultural resources. It also provides five standard operating procedures (SOPs), including protocols for accidental or inadvertent discoveries, which can be used to avoid significant impacts on cultural resources during project construction, demolition, or operation.

The ICRMP includes an archaeological sensitivity map for Fort Huachuca that was completed in 1988. The project area and most of the cantonment area is considered “neutral.” Although the area has been heavily impacted by construction and use of the cantonment area for over 100 years, historic-period artifacts typically associated with refuse deposits from use of the cantonment are often encountered during subsurface excavations. Such subsurface deposits are more likely to occur with proximity to the Fort Huachuca Historic District (see discussion in Section 3.8.1.3), such as in Parcel A.

3.8.1.2 Traditional Resources

Five traditional cultural properties (TCPs) have been identified on Fort Huachuca by federally recognized Indian tribes. Although none are within the ROI for cultural resources, one is located just over 0.5 miles away.

3.8.1.3 Built Environment Resources

The proposed action includes seven buildings within the Fort Huachuca cantonment area and an unimproved 14.29-acre parcel (Parcel F). Buildings 22102 and 22104 are historic properties. The other five buildings (43083, 43084, 43085, 43086, and 52054) are fewer than 50-years old.

Buildings 22102 and 22104 on Parcel E are located within a National Historic Landmark District (hereafter the “Historic District”). Building 22102 was constructed in 1887 as Officers Quarters, and Building 22104 was constructed in 22104 as Captains Duplex. They are contributing elements to the historical significance of the NHL. The district was placed on the NRHP in 1974 and was expanded and named an NHL in 1976 (SWCA 2009).

A historic viewshed surrounds the Historic District (GADA 2002). The historic viewshed boundaries encompass the parade ground and surrounding buildings. Hungerford Avenue binds it on the northeast, Grierson Service Road on the Southeast, Carnahan Street on the Southwest and Christy Avenue on the northwest (Fort Huachuca 2002). The principal vantage points to the Historic District are at the intersections of Christy and Boyd avenues, Christy and Adair Avenues, and Grierson and Mizner Avenues/Henry Circle. The vantage points within the Historic District area offer views of the historic buildings, and hilltop vantage points offer views of the entire NHL (Fort Huachuca 2002).

Buildings 43083, 43084, 43085, and 43086 were constructed between 1958 and 1974 as Bachelor Officer Quarters; also referred to as Unaccompanied Personnel Housing (UPH). The Army compiled a historic context on UPH during the Cold War Era, and the Advisory Council on Historic Preservation completed a Program Comment for these types of DoD facilities (Kuranda et al. 2003; Nau 2006). Buildings 43083, 43084, 43085, and 43086 are in the category of included properties listed in the Program Comment—Building Category 72410, UPH. The buildings represent three of the standard UPH (1946-1974) types of housing described in the Army historic context (Tagg 2010b). As such, the Program Comment states that the Army is not required to complete additional documentation, and no further management considerations are needed because the buildings are UPH with standard designs that were documented in the UPH report (Tagg 2010c).

Building 52054 is a guesthouse constructed between 1971 and 1972 and is listed as Army lodging. It is less than 50 years old, is of modern construction style, and was a support building during the Cold War. Although Building 52054 is less than 50 years old, it could potentially be eligible for listing on the NRHP under Criteria Consideration G: Properties That Have Achieved Significance within the Last 50 Years. Properties are eligible under Criteria Consideration G when they are shown to be exceptionally important to an event or to a category of resources (National Park Service 1997). In this case, Building 52054 could be eligible for its association with the Cold War. However, generally, support buildings, such as Building 52054, a guesthouse, are normally not considered of exceptional importance when evaluating Cold War facilities if they are “within the context of standard Army development” (Tagg 2010b). As a support building, Building 52054 would have been built regardless of the Cold War (Tagg 2010c). Therefore, Building 52054 is treated as ineligible for this analysis.

3.8.2 Environmental Consequences

In accordance with 36 CFR Part 800, the implementing regulations for the NHPA, an adverse effect on cultural resources is found when the proposed action may alter, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion on the NRHP in a manner that would diminish the integrity of a property’s location, design, setting, materials, workmanship, feeling, or association. Adverse effects may include reasonably foreseeable effects

caused by the proposed action that occur later or farther removed in the distance or that are cumulative.

Adverse effects on historic properties include the following:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within its setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features; or
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

For the purposes of this PAL analysis, impacts on cultural resources are considered significant if prehistoric or historic-era resources that are eligible for listing or are formally listed on the NRHP are disturbed or destroyed. Direct impacts are those in which project activities disturb or destroy the integrity of NRHP-listed or NRHP-eligible cultural resources. This can include ground-disturbing activities, noise or other vibrations, renovation, or removal. Indirect impacts are those that may occur at a point later in time but that can be reasonably predicted at the time of project implementation.

A significant adverse impact also could occur if the project activities were not to abide by the established management documents, such as the ICRMP, or agreement documents, such as a Programmatic Agreement and specified lease provisions.

3.8.2.1 Preferred Alternative

The Army is conducting Section 106 consultations and developing a Programmatic Agreement (PA) with the Arizona SHPO and Advisory Council, in accordance with 36 CFR 800.14(b). The purpose of the PA is to resolve the potential adverse effects to cultural resources. The PA will identify detailed management measures in regards to both archaeological resources (unknown and unknown) and historic properties, and provide an enforcement mechanism of such measures to ensure that cultural resources are not adversely affected by implementation of the Preferred Alternative. The PAL parcels would not be conveyed to Rest Easy before the PA is executed. Upon conveyance, Rest Easy would strictly adhere to the management measures detailed in the PA, thereby eliminating the potential for adverse effects on cultural resources.

Archaeological Resources

No archaeological resources have been identified, or are suspected to be located on the PAL Parcels. A provision would be included in Exhibit E of the ground lease regarding "Accidental or Inadvertent Discoveries of Historic Properties." The lease provision would be based on SOP 4 in the ICRMP that establishes steps to be undertaken when the accidental discovery of potential archaeological resources occurs on a project that has already been coordinated with the SHPO and the installation's Historic Properties Manager. The PA will also detail the procedures Rest

Rest Easy must follow should an inadvertent discovery occur during ground-disturbing activities. Rest Easy would fully comply with management measures identified in the PA and the lease documents.

Traditional Resources

One TCP is located just over half a mile from the ROI, but no traditional resources have been identified within or adjacent to the PAL parcels. The Army has consulted with federally recognized tribes under the NHPA to identify concerns the tribes may have regarding the proposed project and potential impacts on traditional resources, including the nearby TCP. No concerns have yet been voiced by the tribes (Tagg 2010). Correspondence letters received from the tribes are included in Appendix C. Given that the Preferred Alternative would be within the cantonment area, it is not expected that any concerns will be voiced (Tagg 2010a).

Built Environment Resources

No adverse effects on historic properties or the associated viewshed are anticipated. Fort Huachuca is developing a PA with the SHPO, in accordance with 36 CFR 800.14(b), to resolve the potential adverse effects to historic properties within the ROI and the associated historic viewshed. The PAL parcels would not be conveyed to Rest Easy until the PA has been executed.

As part of this process, condition assessments would be conducted on the historic properties (Buildings 22102 and 22104) to document their condition before their release from federal management. The PA would provide strict and detailed management measures to ensure that historic properties are not adversely affected. Proposed renovations to those buildings would be limited to necessary life safety modifications and interior décor changes. Such modifications would be coordinated with the SHPO and agreed to in the PA. Rest Easy would strictly adhere to the management measures detailed in the PA, thereby eliminating the possibility of adverse effects on historic properties.

No adverse effects on the viewshed of the Historic District are expected as a result of the Preferred Alternative. The new hotel would be designed in accordance with the Installation Design Guide and other guidance documents that ensure the visual continuity and harmony of new construction within the cantonment area. The closest vantage point from the Historic District to Parcel F is slightly less than half a mile. As part of the EA and PA process, Fort Huachuca's Master Planning office evaluated the potential for the proposed 4-story hotel to adversely affect the Historic District viewshed. This was done using GIS and computer simulation. The simulation shows that the hotel would be visible in the far distance from certain vantage points within the Historic District, but would not be overly intrusive. To further minimize the limited visual impact of the hotel, Fort Huachuca proposes to plant Italian Cypress, a fast-growing evergreen trees, to screen the view from certain vantage points. The planting of screening material would be coordinated with the SHPO as part of the PA. No visual changes to the exteriors of the buildings in Parcel A are proposed. If Rest Easy considers the addition of outdoor recreational amenities such as sports courts or a tot lot, such amenities would be coordinated with the SHPO and sited so as not to have an adverse visual impact on the adjacent Historic District.

Rest Easy would be bound by the terms of the PA, applicable regulations, and any lease provisions regarding cultural resources. Compliance with such enforcement mechanisms would eliminate the potential for adverse effects to cultural resources.

3.8.2.2 No Action Alternative

Under the No Action Alternative, the proposed action would not occur. No ground-disturbing activities and no construction/renovation would occur. Therefore, no impacts on archaeological, traditional resources, historic buildings, or structures would occur.

3.9 SOCIOECONOMICS

This section contains an analysis for social and economic resources, including a discussion of current social and economic data relevant to Fort Huachuca, the town of Sierra Vista, and Cochise County, which are defined as the ROI for this analysis. The ROI was chosen because Fort Huachuca is in Cochise County, and this is the geographical area where potential impacts would occur. This section discusses community characteristics, including population, housing, employment, and economic trends taking place within the project area. Also included are data relevant to the state of Arizona and the United States, which provide a comparative discussion when analyzed against the ROI. Information in this section was obtained from various sources, including the US Census Bureau, the US Bureau of Economics, and the State of Arizona Economic Analysis Division.

3.9.1 Affected Environment

Population

Historic, current, and projected population counts in the project area, compared to the state, are provided in Table 3-3. Sierra Vista is the largest city in Cochise County, with a population of 37,775 residents in 2000 and an estimated 43,227 residents in 2009, representing a 14.4 percent increase. According to the US Census Bureau, the population of Cochise County was 118,028 in 2000 and increased to 129,518 in 2009, representing a 9.7 percent increase. In 2000, the total population in Huachuca City was 1,751; in 2009, total population increased by 13.3 percent, to 1,985. Increase in total population in Arizona between 2000 and 2009 was 28.5 percent.

**Table 3-3
Population Characteristics**

Location	1990 ¹	Percent Change	2000 ²	Percent Change	2009 ²	2020
City of Sierra Vista	32,983	14.5	37,775	14.4	43,227	69,963 ³
Cochise County	97,624	20.9	118,028	9.7	129,518	169,717 ³
Huachuca City	—	—	1,751	13.3	1,985	2,043 ³
State of Arizona	3,665,228	39.9	5,130,632	28.5	6,595,778	8,779,567 ³
United States	248,709,873	13.1	281,421,906	9.0	307,006,550	341,386,665

¹Forstall 1995

²US Census Bureau 2010

³Arizona Department of Commerce 2010

Employment

Total full-time and part-time employment in Cochise County in 2008 was approximately 60,273, a 17.2 percent increase from 2000 at 51,397. Employment in Cochise County, which includes Sierra Vista, relies on Fort Huachuca, which has historically been the single largest employer in the county. Government and government enterprises employ 17,461 residents: 58.7 percent (10,257) employed by the federal government and 41.2 percent (7,204) employed by state and

local government. Other major industries in the county are health care and social assistance, professional, scientific and technical services, and retail trade (US Bureau of Economic Analysis 2010).

In 2009, the annual unemployment rate in Sierra Vista was 4.4 percent (State of Arizona 2010), which is lower than the rate in Cochise County and the state of Arizona, at 7.4 percent and 9.1 percent (US Bureau of Labor Statistics 2010).

Fort Huachuca had 15,405 full-time employees as of September 2009. Of this, 3,197 were permanent military personnel, 3,169 civilian personnel (full-time equivalent [FTE]), 3,165 students FTE, and 5,256 on-post and 618 off-post contractors (US Army Garrison 2010). Employment at Fort Huachuca is predicted to remain constant or to increase slightly (US Army Garrison 2010).

Housing and Lodging

Housing supply estimates for Cochise County and Arizona are provided in Table 3-4. As of July 2008, a grand total of 57,868 housing units were available in Cochise County.

As of early 2010, there were approximately 1,780 lodging units in the Sierra Vista area (Cochise College 2010); Fort Huachuca has a total of 284 rooms, and demand and occupancy for these rooms has grown over the years. Between fiscal year (FY) 2001 and FY2005, Army Lodging operations at Fort Huachuca increased by approximately 8.6 percent, accommodating 90,901 room nights and issuing 189,682 Certificates of Non Availability (CNAs). In 2001, Fort Huachuca had 83,730 room nights and 55,128 CNAs. The annual occupancy rate was 87.7% in 2005 and averaged 82.2 percent in FY 2001 through FY 2004.

Table 3-4
Housing Characteristics

Year	Cochise County	% Change from 2000	Arizona	% Change from 2000
2000	51,126	—	2,189,189	—
2008	57,868	13.1	2,730,786	24.7

Source: US Census Bureau

Local Economy

According to the Bureau of Economic Analysis, per capita personal income for Cochise County increased by 65.2 percent, from \$20,123 in 2000 to \$33,259 in 2008. This compares with a state per capita income of \$34,339 in 2008. Median household income for Cochise County in 2008 was \$44,000, which is 83.3 percent of the state median household income at \$51,009 (US Bureau of Labor Statistics 2010).

Environmental Justice and Protection of Children

EO 12898, Federal Actions to Address Environmental Just in Minority Population and Low-Income Populations, and its accompanying memorandum have the primary purpose of ensuring fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. As such, each federal agency must identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its

program, policies, and activities on minority and low-income populations. Fort Huachuca is not in an area that has a disproportionately high concentration of minority or low-income populations.

EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, directs each federal agency to make it a high priority to identify and assess environmental health risks and safety risks that could disproportionately affect children by incurring environmental health or safety risks that might arise as a result of the agency's policies, programs, activities, and standards.

3.9.2 Environmental Consequences

3.9.2.1 Preferred Alternative

Short- and long-term minor beneficial and short-term minor adverse effects would be expected from implementation of the Preferred Alternative as detailed in the subsections below.

EIFS Model Results

Short- and long-term minor beneficial effects on the regional economy, regional employment, and income are expected with implementation of the PAL program. The expenditures and employment associated with the construction and renovation of Fort Huachuca lodging would increase ROI sales volume, employment, and income. The economic benefits would last only for the duration of construction. These changes in sales volume, employment, and income would fall within historical fluctuations (i.e., within the RTV range) and would be considered minor (Appendix B). In the long-term, new jobs associated with the operation of the lodging would result in long-term minor beneficial effects on regional employment and income.

Population and Employment

Some nonresident employees may temporarily relocate to Cochise County for jobs associated with renovation, construction, and demolition activities. However, it is most likely that such employment opportunities would be filled persons already living within the ROI. Therefore, the potential increase in population within the ROI would be considered negligible. Short-term minor beneficial impacts could be expected from both the direct and indirect employment opportunities created during the IDP (first 5 years).

Operation and maintenance of the proposed hotel would result in a long-term minor beneficial increase in employment. A large hotel (500 rooms or more) typically requires more than 100 employees (US Bureau of Labor Statistics 2010) to operate. As such, the Preferred Alternative would be expected to have a long-term minor beneficial effect on employment within the ROI. Persons choosing to relocate Cochise County might fill some of the jobs created by the new hotel. Given the population of the County, the project could result in a slight increase in population, the effect of which would be negligible.

Housing and Lodging

Under the Preferred Alternative, the total amount of transient lodging on Fort Huachuca would increase by 235 units. Due to this increase, long-term minor beneficial effects on on-post lodging and short-term minor adverse effects on off-post lodging would be expected.

On-Post Lodging: Because the hotel would be operated by a private enterprise, it is important for the hotel to be competitive with similar hotels in Sierra Vista and Cochise County to remain a viable operation. As such, Fort Huachuca would have to provide a level of quality equal to or higher than that of lodging in the regional market sector to accommodate guest expectations. Under the Preferred Alternative, the developer would renovate lodging and construct a new

facility to provide a sufficient number of on-post rooms to meet Fort Huachuca's lodging requirements. Once the proposed hotel is operational, demand for on-post lodging would increase due to the continuing student need for lodging. Demand would also increase because the installation would then be able to provide modern lodging facilities and services, thereby benefiting the quality of life of those who stay at the installation. As such, the Preferred Alternative would result in beneficial socioeconomic effects.

Off-Post Lodging: On-post lodging rates would be competitive with area market hotels. As such, this would result in a decrease in CNAs issued, thereby resulting in a decrease in demand for lodging near Fort Huachuca, in Sierra Vista and greater Cochise County. However, despite the increase in lodging on the installation, Fort Huachuca would likely not be able to accommodate all the demand for on-post lodging, especially during peak periods when class is in session.

As previously stated, in FY 2005, the installation accommodated 90,901 room nights and issued 189,682 CNAs to military travelers when there was no vacancy on the installation, which is a 244 percent increase from FY 2001. The number of CNAs issued would be reduced considerably after the completion of the proposed 519-room hotel. Many travelers currently offered CNAs would be accommodated on the installation due to the increase in lodging units, the appeal of the newly constructed hotel, and improved accessibility to all installation activities. Therefore, the Preferred Alternative is expected to result in a small decrease in off post-post lodging demand that should lessen over time resulting in a minor adverse effect.

Local Economy

Short- and long-term beneficial effects on the local economy are expected with implementation of the Preferred Alternative. The short-term effects include the expenditures and employment associated with renovating lodging units. Additionally, construction of the 519-room hotel would generate additional sales revenue, employment wages, and personal income. The long-term benefits include revenue from the operation of the hotel and associated taxes, such as sales and lodging, and revenue from guests to Fort Huachuca and Cochise County.

Environmental Justice and Protection of Children

The Preferred Alternative would not result in disproportionate adverse environmental or health effects on low-income or minority populations. The Preferred Alternative is not an action with the potential to substantially affect human health or the environment by excluding persons, denying persons benefits, or subjecting persons to discrimination.

There is a potential for short-term minor adverse effects on protection of children under the Preferred Alternative. This potential impact could result from the presence of construction sites on Fort Huachuca, which could pose a potential safety hazard to children. However, safety measures stated in 29 CFR Part 1926, Safety and Health Regulations for Construction, and Army Regulation 385-10, Army Safety Program, would be followed during construction, thereby minimizing the potential impact on the health and safety of residents, including children. Barriers would be placed around construction sites to deter children from entering these areas.

3.9.2.2 No Action Alternative

Under the No Action Alternative, no temporary or permanent lodging would be constructed, and existing housing units would not be renovated. As such, no direct or indirect impacts on the socioeconomic conditions or lodging would result, and there would be no change in environmental or health effects on low-income or minority populations or children.

3.10 TRANSPORTATION

3.10.1 Affected Environment

Transportation in and around Fort Huachuca is mainly via road and street networks, and public transit. There is no cohesive network supporting nonmotorized transportation. Sidewalks are mainly in the residential areas and are not readily available for foot traffic throughout the installation. The transportation system serves installation traffic, consisting of everyday work, living, and recreation trips.

Fort Huachuca's cantonment area is approximately four miles west of Sierra Vista, five miles south of Huachuca City, and 15 miles north of the Mexican border. Access to Fort Huachuca is gained through three access control points: the Main Gate, West Gate, or East Gate. The Main Gate is west of State Highway 90 and supports most of the installation traffic due to its proximity to retail areas and housing (US Army 2010b). Fry Boulevard (State Highway 92) is the major commercial strip in Sierra Vista and is east of the Main Gate. The intersection of State Highways 90 and 92 supports a traffic volume of approximately 29,000 average daily vehicles (ADOT 2010). The East Gate entrance is west of the intersection of Brainard Road and Carter Street. Brainard Road has limited access hours of 8:00 AM and 5:00 PM. The West Gate near the Blacktower Area provides access to people who live west of the installation and is accessible by Canelo Road.

The closest airport to Fort Huachuca is Sierra Vista Municipal Airport, which shares its facilities with Libby Army Airfield and is approximately two miles northeast of the cantonment area. Tucson International Airport is 75 miles northwest of the installation. Transportation shuttles are available from Tucson International Airport to Fort Huachuca.

3.10.2 Environmental Consequences

3.10.2.1 Preferred Alternative

Short- and long-term minor adverse transportation effects would be expected. Short-term localized traffic delays from construction vehicles would be likely. Long-term minor adverse changes in traffic patterns from the relocation and consolidation of lodging facilities could also be expected.

During the IDP, traffic congestion would increase within the cantonment area due to additional demolition and construction vehicles traveling to and from the PAL parcels. These effects would be temporary and would end with the demolition and construction phase. A total of approximately 2,700 heavy truck trips, or an average of one to two trucks per day, would be required to deliver materials during construction and to remove demolition debris over the duration of the project. This additional traffic would be minute compared to the vehicles processed daily at the installation's gates, or to any off-post roadway segment. In addition, about 80 construction workers would access the sites on an average workday. The local road infrastructure would be sufficient to support any increase in construction vehicle traffic.

In addition, accommodations to facilitate utility system work would be expected, creating short-term traffic delays. Such effects would be minimized by placing construction staging areas where they interfere with traffic the least and limiting construction vehicle movement during peak traffic hours. All construction vehicles would be equipped with alarms for backing up, two-way radios, and "slow moving vehicle" signs, when appropriate.

Long-term adverse traffic impacts would be minor. Although there would be increases in traffic on Parcel F in the vicinity of the new hotel of as many as 4,350 vehicles per day, increases would

be offset by a corresponding decrease of 2,306 vehicles per day at other locations near the facilities that are slated for demolition, particularly Parcels A and C. As such, the overall corresponding increase in trips could be as many as 2,044 vehicles per day at the lodging facilities at full occupancy (ITE 2003). However, many of the students staying on-post either do not have vehicles, or share a vehicle with other students. As such, the actual number of additional vehicle trips per day would be less than 2,306. Many of the additional vehicle trips would occur at peak periods and account for some slight increase in on-post, off-post, and gate traffic. These overall effects would be minor.

Additional traffic near parcel F would constitute a minor increase of traffic at nearby intersections and roadway segments, particularly along Smith Avenue, Lawton Road, and Arizona Street. It is not anticipated that hotel traffic would appreciably utilize or have an impact to roadways in nearby off-post residential areas. The local road infrastructure would be sufficient to support this very minor level increase in vehicle traffic.

Because of the overall increase in lodging, the limited transit access, and employees within driving distance of the lodging, the Preferred Alternative would have no appreciable effect on public transit or air traffic in the area. The final design for the proposed hotel is not complete. In the final design stages, the parking upgrades at the proposed hotel would be designed to be adequate for patrons and staff at full occupancy. In addition, extra care would be taken to strategically locate the ingress and egress points to minimize conflicts with other traffic and reduce the potential for congestion at nearby intersections and roadway segments.

3.10.2.2 No Action Alternative

No effects on transportation resources are expected under the No Action Alternative because there would be no change to the road network or increase in traffic volume. Current and future traffic would remain as described in Section 3.10.1.

3.11 UTILITIES

Utility infrastructure generally refers to the supporting infrastructure within a community that enables a population to function in a specified area. Components of a community's utility infrastructure include electricity, natural gas, potable water, solid waste treatment, and wastewater and sewage treatment. This resource is evaluated to determine if upgrades to the existing utility infrastructure would be required to support the proposed action. The scope of this analysis includes utility distribution lines and associated facilities servicing the project area.

3.11.1 Affected Environment

The study area for this analysis encompasses all of Fort Huachuca, including the cantonment area where most of the buildings on the installation are located.

Electricity

Fort Huachuca receives electrical power from Tucson Electric Power via underground distribution circuits that transfer power to overhead electric poles. As of 2008, Tucson Electric Power had a net generating capacity of approximately 2,204 megawatts and is expanding its renewable energy capacity (Tucson Electric Power 2010). In addition to solar power, electric power at Fort Huachuca comes from other renewable energy systems, including wind power, and wood chips at the new barracks (US Army Garrison 2010). The existing distribution system adequately supports the current and future needs of Fort Huachuca (US Army Garrison 2010).

Natural Gas

Southwest Gas provides Fort Huachuca with natural gas via two 400-pounds-per-square-inch supply lines. The current capacity is adequate to support current and foreseeable future demands (US Army Garrison 2010).

Potable Water

Fort Huachuca gets its potable water from a series of ground water wells from the Sierra Vista Subwatershed. The subwatershed is separated into aquifer-forming geologic units known as the Pantano Formation and the Upper and Lower Basin Fill units. These latter units comprise the major aquifer units in the Sierra Vista/Fort Huachuca area and serve Fort Huachuca. These aquifer units have an estimated capacity of 15.6 million acre-feet of ground water. This compares to a total ground water storage capacity of 19.8 to 26.1 million-acre feet for the entire Sierra Vista Subwatershed (US Army Garrison 2010). Ground water from the Sierra Vista Subwatershed regional aquifer is pumped via eight operational ground water production wells on Fort Huachuca; two are on the east range and the remaining six are on-post, between the main gate and the east gate. The total quantity of ground water pumped at Fort Huachuca in 2008 was 1,126 acre-feet, which has been steadily declining as a result of using treated effluent wastewater, eliminating older buildings, stepping up leak detection, and implementing a water conservation program (US Army Garrison 2010). Water is treated and disseminated to all facilities on Fort Huachuca via a system of water supply lines. Water supply and storage is adequate to meet current and foreseeable future needs at Fort Huachuca (US Army Garrison 2010).

Solid Waste

One primary landfill and one secondary landfill, both of which are in Cochise County, accept solid waste from Fort Huachuca. The Huachuca City Landfill is Fort Huachuca's primary landfill and is next to the northwest corner of the East Range. The landfill encompasses approximately 42.9 acres, with an additional 22.6 acres available for future expansion (Town of Huachuca City 2005). The Western Regional Landfill is operated by Cochise County and is north of Fort Huachuca in Whetstone. This landfill has enough acreage for 12 landfill cells; it is currently using the third cell. A cell is approximately 50 feet long by 50 feet wide by 14 feet high. The amount of trash within the cell is 2,500 tons and is compressed at 1,500 pounds per cubic yard; therefore, the landfill has plenty of capacity (Jones 2010). Additionally, Fort Huachuca operates a recycling program for aluminum cans, newspaper, and mixed paper (US Army Garrison 2010).

Wastewater

An installation service contractor provides Fort Huachuca with wastewater collection and treatment services for effluent wastewater. Although most wastewater naturally flows to a single treatment facility, some areas, such as wastewater in the southeastern cantonment area, require pumping through a lift station. After treatment, wastewater is directed to seven effluent recharge basins located on the East Range or directed to holding ponds to be reused as irrigation water for the Fort Huachuca's golf course (Vernadero Group 2009). The wastewater facility at Fort Huachuca is currently operating at less than 25 percent of capacity due to water conservation and mitigation requirements.

Stormwater

Natural drainage ways, channelized improvements, and open culverts compose the stormwater drainage system on Fort Huachuca. However, evaluations of the drainage system have revealed that the channels are undersized and culverts are constricted, causing portions of the cantonment

area to periodically flood. A need has been identified for a comprehensive study to evaluate and subsequently improve the system (US Army Garrison 2010).

3.11.2 Environmental Consequences

Impacts would be adverse if the proposed action resulted in demand on a utility that were to exceed the capacity of that utility. Overall, although the room count for lodging would increase under the proposed action by 235 units, the increase is not expected to create substantial additional demand on utility systems. Further, the water and plumbing systems would need to be upgraded and the HVAC systems, hot water heaters, and electrical and lighting systems in the existing lodging structures in Parcels A and C would be replaced. Such upgrades would result in improved energy efficiencies. More detailed explanations of these effects are provided in the following subsections.

3.11.2.1 Preferred Alternative

Electricity

Under the Preferred Alternative, several buildings currently used as lodging, would be refurbished for short-term use until the proposed 519-room hotel on Parcel F is complete. Demand for electricity is expected to increase slightly in the short term due to routine construction for the refurbishment. However, electrical use at these buildings would likely decrease once complete, due to the installation and implementation of energy efficient devices and practices. At full build-out, lodging on Fort Huachuca would increase by 235 units, to a total of 519 units, representing an approximately 83 percent increase in lodging units. Electrical service for the proposed hotel would be extended to Parcel F. Given the current and growing electrical distribution capacity of Tucson Electrical Power, the anticipated increase in demand for electricity would not exceed capacity (US Army Garrison 2010).

The proposed wireless fidelity or WiFi for the proposed hotel has the potential to impact Fort Huachuca's ability to conduct sensitive electronic communications and testing at the Buffalo Soldier Electronic Test Range through disruptions to the electromagnetic spectrum. However, because the test range is protected by Arizona SB 1387, Rest Easy would install wired connections or protective shielding, so as to not interfere with the installation's ability to execute electronic testing at the test range.

Natural Gas

The increase in lodging as a result of the Preferred Alternative would increase the use of natural gas. This is not expected to exceed the amount Southwest Gas can supply to Fort Huachuca (US Army Garrison 2010).

Potable Water

As stated, water consumption at Fort Huachuca has been steadily declining. Under the Preferred Alternative, water use from the buildings on Parcels A and C would be eliminated, and although water distribution capacity is adequate to service the proposed hotel on Parcel F, ground water use would increase within the cantonment area. However, the Preferred Alternative would not result in a net increase in ground water use within the Sierra Vista Subwatershed regional aquifer because only the physical location of the water use would change, not overall consumption, as lodging demand moves from the surrounding communities to Fort Huachuca.

Additionally, operations of the hotel would comply with the water conservation policies implemented at Fort Huachuca for minimizing the increase in water consumption. To offset any

potential increase in ground water consumption from the Preferred Alternative, Rest Easy would develop an irrigation plan once the final design for the buildings and associated landscaping is complete. The irrigation plan would require water efficiency measures to reduce the amount of ground water consumption needed to maintain the lodging structures and associated landscaping. If a swimming pool were to be included in the final hotel design, Rest Easy would need to add additional ground water use offsets into the project design to compensate for increased water usage. The design would likely include stormwater retention areas to offset any the increase in ground water use. Such a plan would allow stormwater to infiltrate and recharge the aquifer. It should be noted that current conservation easements to offset ground water use cost about \$2 million for a 100 acre-feet per annum offset. If Rest Easy's design cannot capture 100 percent of the required offset, they will be responsible for paying any associated fees for water consumption.

Solid Waste

Under the Preferred Alternative, the overnight population at Fort Huachuca would increase, given the increase in lodging. Assuming full occupancy of the lodging facilities, a corresponding long-term minor increase in solid waste generation would be expected.

Renovation, construction, and demolition activities would measurably increase the generation of solid waste during the IDP. Solid waste would be disposed of at the Huachuca City landfill, and, if necessary, at the Western Regional Landfill operated by Cochise County. Both landfills have enough space to collect and properly dispose of any nonhazardous solid waste generated by the Preferred Alternative. However, per DOD Instruction 4715.4, - Pollution Prevention, 40 percent of non-hazardous solid waste and 50 percent of construction and demolition debris is required to be diverted from local landfills. Rest Easy would meet this requirement by examining any residual materials from building demolition and recovering or reusing those materials elsewhere on the installation as appropriate. Meeting this requirement would reduce the generation and subsequent disposal of solid waste to landfills.

Wastewater

The Preferred Alternative would result in a long-term increase in effluent wastewater assuming full occupancy of the new lodging facilities. However, because the wastewater facility at Fort Huachuca is currently operating at less than 25 percent of capacity due to water conservation and mitigation requirements, the facility would be able to accommodate the minor increase in effluent wastewater.

Stormwater

The increase in impervious surface resulting from construction of the new hotel and parking areas in Parcel F would increase the stormwater runoff. In order to comply with USEPA stormwater discharge requirements under the National Pollution Discharge Elimination System, a site-specific SWPPP would be developed, which would include an erosion and sediment control plan. In addition, the new hotel would be designed to ensure that stormwater is conveyed away from structures and directed to flumes, pipe systems, or stormwater retention areas. Potential increases in runoff associated with the new hotel would be offset by improvements in on-site stormwater capture and collection infrastructure. Additionally, demolition of the existing lodging structures in Parcel A and C would further offset the potential for adverse effects from stormwater runoff.

Further, the US Army Corps of Engineers (USACE) has identified the need for a comprehensive study to evaluate and subsequently improve the stormwater drainage system (US Army Garrison 2010).

3.11.2.2 No Action Alternative

No effects on utilities or landfills are expected under the No Action Alternative because there would be no increase in utility demand.

3.12 HAZARDOUS AND TOXIC SUBSTANCES

3.12.1 Affected Environment

The use, storage, transport, and disposal of hazardous and toxic substances are heavily regulated at the federal, state, and local levels. For this analysis, the terms hazardous waste, hazardous materials, and toxic substances include those substances defined as hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), and the Toxic Substances Control Act (TSCA). In general, they include substances that, because of their quantity, concentration, or physical, chemical, or toxic characteristics, may present substantial danger to public health or welfare or the environment when released.

To identify areas where possible storage, release, or disposal of hazardous substances or petroleum products or their derivatives has occurred, an Environmental Condition of Property (ECP) report was prepared for the housing privatization footprint (USACE 2010). The ECP covers hazardous and toxic substances as defined in CERCLA, RCRA, and TSCA, as well as other materials that could affect human health and safety and the environment, such as munitions and explosives of concern. The relevant findings of the ECP are summarized below. No other concerns regarding the use, storage, transport, or disposal of hazardous and toxic substances at the property have been identified.

Lead-Based Paint. Because all of the buildings within the PAL footprint were constructed before 1978, lead-based paint (LBP) is likely present in interior and exterior paint. Fort Huachuca does not have an LBP survey. During a visual site inspection in May 2010, interior paint was generally observed to be in good condition. Paint chips from exterior peeling paint were observed on the soil around Buildings 43086, 22040, 22028, 42017, 22104, and 22102, indicating a potential release of LBP. With the exception of the northwest side of Building 22102 (Hazen Annex), only a minor amount of small paint chips was observed in soil around each building. Exterior peeling paint was also observed on Building 43083, but no paint chips were observed in the soil. No exterior peeling paint or paint chips in the soil were observed on Buildings 43084, 43085, and 52054.

Asbestos-Containing Materials. Because all of the buildings within the PAL footprint were constructed before 1978, asbestos-containing material (ACM) is likely present. Fort Huachuca does not have an ACM survey.

Pesticides. The termiticide chlordane was applied at Fort Huachuca before it was banned by the USEPA in 1988, after its effects on human health and the environment became better understood (USACE 2008). According to Public Works Technical Bulletin 200-1-31, legally applied chlordane does not require remediation under CERCLA or RCRA and can be managed in place, which is consistent with the pesticide application exception described in 42 USC, 9607(i) (USACE 2004). No evidence that chlordane or other pesticides were spilled or illegally applied was found during this investigation.

Several biodegradable pesticides are applied as needed at Fort Huachuca. All pesticides are applied according to the manufacturer's directions by trained staff (USACE 2008).

Polychlorinated Biphenyls. Older lighting ballasts and transformers on the property may contain polychlorinated biphenyls (PCBs). Although a survey of transformers was conducted in 1990 and PCB-containing transformers were removed, analytical data has not been reported for some transformers, so some PCB-containing transformers may still be present at Fort Huachuca (USACE 2008). Pad-mounted transformers were observed outside Buildings 42017, 43083, 43085, 22102, and 52054. There is no evidence that leaks or spills of PCB-containing materials have occurred on the property.

Waste Management. A private contractor manages solid waste removal throughout the installation. Hazardous waste is managed in accordance with the installation's Hazardous Waste Management Plan (Environmental and Natural Resources Division 2009), which details roles and responsibilities related to, as well as the proper handling, storage, use, disposal, and cleanup of, hazardous materials and waste.

Storage Tanks. No underground or aboveground storage tanks containing hazardous materials or petroleum products are known or suspected to exist on the property. Fort Huachuca personnel reported that there is a possibility that undocumented heating oil tanks remain buried in the cantonment area (Sieracki 2010).

Munitions and Explosives of Concern. There is no evidence that the property has been used as a training or impact range, and no munitions and explosives of concern (MEC) are known or suspected on the property. However, because the project is on a military installation, there is the possibility that MEC may be present.

Radioactive Materials. Many smoke detectors use a small amount of the radioactive oxide of americium-241 as a key component to detect smoke particles (USEPA 2008), so smoke detectors on the property may contain this radioactive material. No other radioactive materials or wastes are known, or suspected to have been, generated, stored, or disposed of at the property.

Radon. Radon samples have been collected from many buildings on the installation, including Buildings 43084, 43084, 43085, and 43086. None of the samples collected from buildings on the property exceeded the US EPA's recommended action level for indoor radon of 4 picoCuries per liter (pCi/L; Fort Huachuca 1990). The US EPA considers Cochise County a radon Zone 2, which means that radon levels would be expected to be between 2 and 4 pCi/L. Thirty-two sites in Cochise County have been tested for radon, and six percent exceeded 4 pCi/L (Environmental Data Resources, Inc. 2010).

3.12.2 Environmental Consequences

An action is considered to have an adverse effect with regard to hazardous and toxic substances if it were to:

- Substantially increase hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Expose workers to contaminated or hazardous materials at levels in excess of those permitted by the Federal Occupational Safety and Health Administration (OSHA) in CFR 29, Part 1910, or expose members of the public to direct or indirect contact with hazardous materials from proposed project construction or operations; or

- Mobilize contaminants in the soil or ground water or discharge or dispose of hazardous materials into soil or ground water, creating potential pathways of exposure to humans or wildlife that would result in exposure to contaminants at levels that would be harmful.

3.12.2.1 Preferred Alternative

Overall, short-term minor adverse and long-term beneficial would be expected to result from implementing the Preferred Alternative, given that the Preferred Alternative would comply with federal, state, and municipal laws, ordinances, and regulations and follow BMPs related to hazardous materials management.

Construction, demolition, and renovation would generate construction debris. These activities would also require that petroleum, oil, lubricants, paint, asphalt, and other potentially hazardous materials be transported to, temporarily stored on, and used at Fort Huachuca. Due to the age of the project buildings, they are assumed to contain LBP, ACM, and PCBs (in light ballasts and transformers). As such, this phase of the project would disturb building components and generate waste containing these hazardous and toxic substances.

Rest Easy would be responsible for the proper handling, storage, use, transport, disposal, and cleanup of hazardous and toxic materials and waste and solid waste generated by project activities. To ensure the proper management of these materials and to protect people and the environment from hazards associated with these materials, Rest Easy would develop and implement a hazardous materials management plan, a hazardous waste management plan, and a site-specific health and safety plan. The plans would adhere to federal, state, and municipal laws, ordinances, and regulations and detail relevant BMPs. The plans would also provide for response actions if contamination were encountered on the property. Construction debris would be characterized for ACM, LBP, and PCBs and disposed of in accordance with applicable federal, state, and local solid waste management regulations.

Where relevant, Rest Easy may manage LBP, ACM, and PCBs in place. Regarding LBP, Army policy calls for controlling LBP by using in-place management rather than mandated removal procedures. In-place management is used to prevent deterioration over time of those surfaces likely to contain LBP, followed by replacement as necessary. LBP would be encapsulated or removed in accordance with Army, Housing and Urban Development, and OSHA guidelines, which cover contractor training, notification requirements, use of personal protective equipment, and approved disposal methods. Potential ACM and PCB-containing equipment could also remain in place as long as it is in good condition. The condition of potential ACM and PCB-containing equipment would be monitored periodically and it would be properly removed if it were deteriorating.

With these measures, adverse impacts would be minor and limited to the duration of construction, demolition, and renovation activities. Long-term beneficial impacts would result from removing or replacing materials containing ACM, LBP, and PCBs by eliminating the potential for these materials to create health hazards or be released to the environment.

3.12.2.2 No Action Alternative

Minor adverse effects could occur under the No Action Alternative. It is possible that LBP, ACM, and older lighting ballasts containing PCBs could deteriorate to the extent that those substances would pose health risks to occupants. It is possible that LBP has been released to soil by exterior peeling paint, and this could continue if peeling paint were not addressed, increasing the potential of adverse impacts related to lead in soil. It is expected that Fort Huachuca would continue to

mitigate these potential hazards in accordance with all applicable federal, state, and local laws, ordinances, and regulations.

3.13 CUMULATIVE EFFECTS SUMMARY

Other construction or development projects within the Fort Huachuca region could produce air emissions, noise, economic benefits, water pollution, or other effects typically associated with such activities. However, the magnitude of effects that would result from implementation of Preferred Alternative would not be sufficient to substantially contribute to the cumulative effects. The proposed action would not result in significant impacts on any of the environmental resources analyzed in the EA. The analysis identified minor adverse impacts related to land use, aesthetics, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics, transportation, utilities, and hazardous and toxic substances. Beneficial impacts were identified for aesthetics, socioeconomics, utilities, and hazardous and toxic substances. Therefore, the proposed action would have a very minor contribution to cumulative impacts within the ROI.

3.14 MITIGATION SUMMARY

Mitigation actions are used to reduce, avoid, or compensate for significant adverse effects. The EA does not identify any potentially significant adverse effects or the need for any specific mitigation. Numerous measures would be taken as part of the proposed action to ensure that adverse effects are very minor, or avoided altogether. The ground lease would include provisions to hold Rest Easy accountable for full compliance with all federal, state, and local regulatory requirements. The Programmatic Agreement being developed between the Army and the SHPO for this action would be concluded prior to the leasing of the PAL parcels to Rest Easy. The terms of the PA would be in effect at the time of conveyance, and ensure that Rest Easy would not take any action that could cause potentially adverse effects to historic resources. Rest Easy would also prepare an Environmental Management Plan to be approved by the installation. Such a plan is required as part of the lease agreement, and ensures compliance with all applicable environmental laws and regulations.

SECTION 4.0

CONCLUSIONS

This EA has been prepared to evaluate the potential effects on the natural and human environment from the proposal to implement the PAL program at Fort Huachuca. The EA examines the Preferred Alternative and a No Action Alternative, which CEQ regulations prescribe to serve as the baseline against which the Preferred Alternative and alternatives are analyzed.

The EA considers potential effects on a range of environmental resources and conditions, including land use, aesthetic and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics (including environmental justice and protection of children), transportation, utilities, and hazardous and toxic substances.

Implementing the Preferred Alternative would result in a combination of minor adverse and minor beneficial effects. Short-term minor adverse effects on aesthetics and visual resources, air quality, noise, soils, water resources, biological resources, transportation, utilities, and hazardous and toxic materials are expected, primarily associated with demolition, construction, and renovation activities. Long-term minor adverse effects are expected on air quality, and traffic/transportation. Short-term minor beneficial effects on the local economy are expected from expenditures and employment associated with lodging renovation and construction. Long-term minor beneficial effects on aesthetic and visual resources, socioeconomics (quality of life) are expected from the overall improved quality of the lodging. Long-term minor beneficial effects on utilities and hazardous materials are expected from the overall upgrade of utility services and from removing or encapsulating hazardous materials.

No mitigation measures were identified in the EA and the project would have a very minor contribution to cumulative effects within the region.

For each resource, the predicted effects from both the Preferred Alternative and the No Action Alternative are summarized in Table 4-1.

Table 4-1
Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Effects	
	Preferred Alternative	No Action Alternative
Land use	No adverse effect	No effect
Aesthetic and visual resources	Short- and long-term minor adverse Long-term minor beneficial	No effect
Air quality	Short- and long-term minor adverse	No effect
Noise	Short-term minor adverse	No effect
Geology and soils	Short-term minor adverse	No effect
Water resources	Short-minor adverse	No effect
Biological resources	Short-term minor adverse	No effect
Cultural resources	No adverse effect	No effect
Socioeconomics	Short-term minor adverse Short- and long-term minor beneficial	No effect
Transportation	Short- and long-term minor adverse	No effect
Utilities	Short-term minor adverse	No effect

Table 4-1
Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Effects	
	Preferred Alternative	No Action Alternative
	Long-term minor beneficial	
Hazardous and toxic substances	Short-term minor adverse Long-term minor beneficial,	Long-term minor adverse

Implementing the Preferred Alternative would not result in significant environmental or socioeconomic effects. Issuance of a Finding of No Significant Impact would be appropriate, and an EIS need not be prepared before implementing the Preferred Alternative.

SECTION 5.0

REFERENCES AND PERSONS CONSULTED

- AAC (Arizona Administrative Code). 2010. *Air Quality Control Standards, Particulate Matter Emissions* URL: <http://www.azsos.gov/aar/2005/22/ctynotic.pdf>. Accessed July 14, 2010.
- ADEQ (Arizona Department of Environmental Quality) 2010. *Air Quality Permits* URL: <http://www.azdeq.gov/enviro/air/permits/index.html>. Accessed July 14, 2010.
- ADOT (Arizona Department of Transportation) 2008. *Average Daily Traffic Counts, Cochise County*. URL: <http://mpd.azdot.gov/mpd/data/Reports/PDF/SHSTrafficLog2006-2008ver2-Rounded.pdf>. Accessed July 14, 2010.
- Arizona Department of Commerce. 2010. The Center for Economic Advancement. Population Statistics. From Internet Web site: <http://www.azcommerce.com/EconInfo/Demographics/>. Accessed July 23, 2010.
- CARB (California Air Resources Board). 2007a. *EMFAC 2007 (v2.3) Emission Factors (On-Road)*.
- CARB (California Air Resources Board). 2007b. *EMFAC 2007 (v2.3) Emission Factors (Off-Road)*.
- CEQ (Council on Environmental Quality). 2010. *Memorandum for Heads of Federal Departments and Agencies on Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*. February 18.
- Cochise College, 2010. Center for Economic Research. 2010 Sierra Vista Economic Outlook. Sierra Vista, AZ. April. From Internet Web site: <http://www.cochise.edu/CommunityResources/CenterforEconomicResearch/Publications/tabid/758/Default.aspx>
- DOD (US Department of Defense). 2010. *Greenhouse Gas Targets Announcement for DOD*. URL: <http://www.defense.gov/releases/release.aspx?releaseid=13276>. Accessed July 14, 2010
- DOE (Department of Energy). 2003. *Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels, Commercial Buildings Energy Consumption Survey*.
- Environmental and Natural Resources Division. 2009. Hazardous Waste Management Plan. Fort Huachuca, Arizona. Directorate of Public Works. July 2009.
- Environmental Data Resources. 2010. *The EDR Radius Map Report with Geocheck, Fort Huachuca PAL, Arizona*. Inquiry Number: 2768321.2s. Environmental Data Resources, Inc., Milford, Connecticut. May 2010.

- Forstall. 1995. US Census Bureau. Population of Counties by Decennial Census: 1900 to 1990. From Internet Web site:
<http://www.census.gov/population/www/censusdata/cencounts/files/az190090.txt>. Accessed July 23, 2010.
- Fort Huachuca. 1990. Radon survey information. Provided by Randee Sieracki, Environmental and Natural Resources Division, DPW, Fort Huachuca, to Emmy Andrews, Tetra Tech. From a report dated June 1990.
- Gerarls A. Doyle and Associates (GADA). 2002. *Viewshed Study: Fort Huachuca National Landmark, Fort Huachuca, Arizona*. Prepared by GADA for Environmental and Natural Resources Division, US Army Garrison, Fort Huachuca, AZ.
- IPCC (Intergovernmental Panel on Climate Change (IPCC) 2007. *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom, 1000 pp.
- ITE (Institute of Transportation Engineers. 2003. *Transportation Engineers Trip Generation Manual*, 7th Edition.
- Jones, Steve. Finance Manager for Cochise County Solid Waste Department. Personal communication with Tetra Tech. August 4, 2010.
- Kuranda, Kathryn M., Brian Cleven, Nathaniel Patch, Katherine Grandine, and Christine Heidenrich. 2003. *Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989)*. R. Christopher Goodwin & Associates, Inc. Frederick, Maryland.
- Nau, John L. III. 2006. *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)*. Advisory Council on Historic Preservation. Washington, D.C.
- Ruble, John. 2011. Email communication from John Ruble, Director of Public Works US Army Garrison Fort Huachuca to Kimberlee Mulhern, Environmental Division Chief, US Army Garrison Fort Huachuca. January 24, 2011.
- SCAQMD (South Coast Air Quality Management District) 1993. *CEQA Air Quality Handbook*. South Coast Air Quality Management District, Diamond Bar, CA.
- Sieracki, Randee. 2010. Environmental and Natural Resources Division, Directorate of Public Works, Fort Huachuca, Arizona. Personal communications with Emmy Andrews, Tetra Tech. July 2010.
- State of Arizona, 2010. *Arizona Workforce Informer*. Unemployment rates and labor force statistics. From Internet Web site:
<http://www.workforce.az.gov/cgi/dataanalysis/AreaSelection.asp?tableName=Labforce>. Accessed July 26, 2010.

- SWCA Environmental Consultants. 2009. *Integrated Cultural Resources Management Plan for Fort Huachuca Military Reservation, Cochise County, Arizona*. SWCA Environmental Consultants, Flagstaff, AZ, Project No. 13233, Cultural Resources Report No. 07-596. Submitted to US Army Garrison, Fort Huachuca, AZ and Engineering and Environmental Consultants, Inc., Tucson, AZ, Work Order Request No. PWE 0380. Revised March 2009.
- Tagg, Martyn. 2010a. Personal communication between Martyn Tagg, Historic Properties Manager, Fort Huachuca, and Erin King, Archaeologist, Tetra Tech, Inc. July 16, 2010.
- Tagg, Martyn. 2010b. *Privatization of Lodging Facilities, Draft Cultural Resources Assessment, Fort Huachuca, Arizona*. Historic Properties Manager, Fort Huachuca, AZ. Cultural Resources Report FH-10-11. 2010.
- Tagg, Martyn. 2010c. Personal communication between Martyn Tagg, Historic Properties Manager, Fort Huachuca, and Julia Mates, Historian, Tetra Tech, Inc. July 23, 2010.
- Tucson Electric Power, 2010. Tucson Electric Power Website. Available online at <http://www.tucsonelectric.com/Company/News/index.asp>). Accessed July 21, 2010.
- USACHPPM (US Army Center for Health Promotion and Preventive Medicine). 1997. Environmental Noise Management Plan and Installation Compatible Use Zone Study for Fort Huachuca, Arizona, February.
- US Army. 2003. Army Lodging Wellness Recommendation. Fort Huachuca – Final Submittal. US Army Community and Family Support Center. Prepared by 3D/I. August 13, 2003.
- US Army. 2006. Privatization of Army Lodging. Fort Huachuca. Prepared by Jones Lang LaSalle. 2006.
- US Army. 2007. *Army Regulation 200-1 - Environmental Quality Environmental Protection*.
- US Army. 2009. Integrated Natural Resource Management Plan, US Army Garrison Fort Huachuca, Arizona. Fort Huachuca, Directorate of Public Works. Draft Final. September 2009.
- US Army Fort Huachuca. 2010a. *2009 Annual Emission Inventory and Emission Statement Report*.
- US Army Fort Huachuca. 2010b. *Directions to Fort Huachuca*. URL: <http://www.Huachuca.army.mil/acs/Relocation/Directions.htm>. Accessed July 13, 2010.
- US Army Garrison. 2010. Programmatic Environmental Assessment. Renewable Energy Resources at Fort Huachuca, Arizona. Prepared by Vernadero Group. February, 2010. Accessed July 23, 2010.
- USACE (US Army Corps of Engineers). 2004. Public Works Technical Bulletin 200-1-31. Guidance for Addressing Chlordane Contamination at Department of Defense Sites. September 2004.

- USACE. 2008. Environmental Condition of Property of the Army Residential Communities Initiative Properties at Fort Huachuca, Arizona. July 2008.
- USACE. 2010. Draft Environmental Condition of Property for the Privatization of Army Lodging at Fort Huachuca, Arizona. July 2010. Draft subject to revision.
- US Bureau of Economic Analysis 2010. Regional Economic Accounts. Local Area Personal Income. Table CA25 Total Employment by Industry. From Internet Web site: <http://www.bea.gov/regional/reis/action.cfm>. Accessed July 23, 2010
- US Bureau of Labor Statistics, 2010. Local Area Unemployment Statistics (LAUS). From Internet Web site: <http://www.bls.gov/LAU/>. Accessed July 27, 2010.
- US Census Bureau 2010. Population Division. Table 1. Annual Estimates of the Resident Population for Counties of Arizona: April 1, 2000 to July 1, 2009 (CO-EST2009-01-04). From Internet Web site: - <http://www.bls.gov/oco/cg/cgs036.htm>. Accessed July 23, 2010.
- USEPA (US Environmental Protection Agency). 2010a. *EPA-Air Data Website*. URL: <http://www.epa.gov/air/data/geosel.html>. Accessed June 2010.
- USEPA. 2010b. *Green Book Website*. URL: <http://www.epa.gov/oar/oaqps/greenbk/>. Accessed June 2010.
- USEPA. 2010c. *Climate Change - Health and Environmental Effects*. Accessed April 22 at <http://www.epa.gov/climatechange/effects/index.html>.
- USEPA. 2005. *Methodology to Estimate the Transportable Fraction (TF) of Fugitive Dust Emissions for Regional and Urban Scale Air Quality Analyses*.
- USEPA. 1995. *Compilation of Air Pollutant Emission Factors, AP-42, 5th edition, Vol. I: Stationary Point and Area Sources*.
- USEPA. 2008. Smoke Detectors: Radiation Protection. Internet Web site: www.epa.gov/radtown/smoke-detector.html. Accessed on July 12, 2010.
- Vernadero Group. 2009. Final Environmental Assessment. The Integrated Natural Resources Management Plan and Real Property Master Plan at Fort Huachuca, Arizona. Prepared for Environmental and Natural Resources Division, Directorate of Public Works, US Army Garrison Fort Huachuca, Arizona. September 2009.

SECTION 6.0

LIST OF PREPARERS

Emmy Andrews
MS, Environmental Management
BA, Art and Art History
Years Experience: 7

John Bock
BS, Environmental Toxicology
Years of Experience: 16

Rima Ghannam
MS, Environmental Management
BS, Agriculture
Years of Experience: 13

Derek Holmgren
BA, International Studies
BS, Environmental Science
MS, Environmental Science
MPA, Environmental Policy and Natural Resources Management
Years Experience: 10

Erin King, MA, RPA
MA, 2005, Cultural Anthropology/Public Archaeology, California State University, Northridge
BA, 2001, Cultural Anthropology/Archaeology, University of California, Santa Barbara
Years Experience: 10

Tim Lavalley, PE
BS, Mechanical Engineering
MS, Civil and Environmental Engineering
Years of Experience: 20

Matt Loscalzo
BA, Political Science
MS, Environmental Studies
Years Experience: 6

Julia Mates
MA, History/Public History
BA, History
Years of Experience: 10

Kristin Shields
BA, Environmental Policy
Years of Experience: 20

Meredith Zaccherio
BS, Biology
BS, Environmental Science
MA, Biology
Years of Experience: 4

SECTION 7.0

MAILING LIST

Federal Agencies

Bureau of Land Management
San Pedro National Riparian Conservation Area
1763 Paseo San Luis
Sierra Vista, AZ 85635

Bureau of Reclamation
300 W. Congress FB37
Tucson, AZ 85701

Coronado National Forest
Sierra Vista Ranger District
5990 S. Hwy 92
Hereford, AZ 85615

Environmental Protection Agency, Region 9
Office of Federal Activities
75 Hawthorne Street
San Francisco, CA 94105

National Park Service
Coronado National Memorial
4101 East Montezuma Canyon Road
Hereford, AZ 85615

United States Air Force
ACC AMIC/PCEV, Attn: Ms. Murray
11817 Canon Blvd., Suite 306
Newport News, VA 23606

United States Fish and Wildlife Service
Arizona Ecological Services, Tucson Suboffice
201 North Bonita
Suite 141
Tucson, AZ 85745

United States Fish and Wildlife Service
2321 W. Royal Palm Road
Suite 103
Phoenix, AZ 85021

United States Geological Survey
520 N. Park Ave.
Suite 221
Tucson, AZ 85719

State Agencies

Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, Arizona 85007

Arizona Department of Water Resources
3550 N. Central Avenue
Phoenix, Arizona 85012

Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086

Arizona Game and Fish Department
Tucson Regional Office
555 N. Greasewood Road
Tucson, Arizona 85745

Arizona State Land Department
1616 West Adams
Phoenix, Arizona 85007

Arizona State Parks
State Historical Preservation Officer
1300 West Washington
Phoenix, Arizona 85007

Local Governments

City of Bisbee
118 Arizona St.
Bisbee, AZ 85638

City of Sierra Vista
1011 N. Coronado Drive
Sierra Vista, AZ 85635

City of Tombstone
PO Box 339
Tombstone, AZ 85638

Cochise County Board of Supervisors
1415 Melody Lane
Building G
Bisbee, AZ 85603

Town of Huachuca City
500 N. Gonzales Blvd
Huachuca City, AZ 85616

Organizations

Center for Biological Diversity
PO Box 1178
Flagstaff, Arizona 86002-1178

Huachuca Audubon Society
PO Box 63
Sierra Vista, Arizona 85636

Sierra Vista Chamber of Commerce
21 E. Wilcox Dr.
Sierra Vista Arizona 85635

Sierra Vista Public Library
2600 E. Tacoma Street
Sierra Vista, Arizona 85635

The Nature Conservancy
1510 E. Fort Lowell
Tucson, Arizona 85719

This page intentionally left blank.

Appendix A
Record of Non-Applicability (RONA) and Emission Calculations

RECORD OF NON-APPLICABILITY

In Accordance with the Clean Air Act - General Conformity Rule For
The Proposed Privatization of Army Lodging, Fort Huachuca, Arizona

16 February 2011

The Army proposes to privatize the ownership and operations of its lodging at Fort Huachuca, Arizona. The Army would convey specified lodging facilities to Rest Easy, LLC. The Army would also grant 50-year leases of the land underlying the existing facilities, as well as other land for construction of new lodging facilities. Rest Easy would be expected to meet Fort Huachuca's lodging requirements through operation and maintenance of the existing facilities, as well as by renovating inadequate facilities and constructing new ones. As a result of the action, the lodging inventory at Fort Huachuca would increase from 271 units to about 500 units. The action would generate new direct and indirect emissions from construction and operation of the additional facilities.

General Conformity under the Clean Air Act, Section 176 has been evaluated according to the requirements of 40 CFR Part 93, Subpart B. The requirements of this rule are not applicable to the Preferred Alternative because:

All activities associated with the Preferred Alternative are located in an area designated by USEPA to be in attainment for all criteria pollutants.

Supported documentation and emission estimates:

- ☐ Are Attached
- ☐ Appear in the NEPA Documentation
- ☒ Other (Not Necessary)

Kimberlee K. Mulhern

Signature

Environmental Officer

USAG Fort Huachuca

Title

14 March 2011

Date

Table A-1 Heavy Equipment Use

Equipment Type	Number of Units	Days on Site	Hours Per Day	Operating Hours
Excavators Composite	1	230	4	920
Rollers Composite	1	230	8	1840
Rubber Tired Dozers Composite	1	230	8	1840
Plate Compactors Composite	2	230	4	1840
Trenchers Composite	1	230	8	1840
Air Compressors	1	230	4	920
Cement & Mortar Mixers	1	230	6	1380
Cranes	1	230	7	1610
Generator Sets	1	230	4	920
Tractors/Loaders/Backhoes	2	230	7	3220
Pavers Composite	1	115	8	920
Paving Equipment	2	115	8	1840

Table A-2 Heavy Equipment Emission Factors (lbs/hour)

Equipment	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Excavators Composite	0.5828	1.3249	0.1695	0.0013	0.0727	0.0727	119.6
Rollers Composite	0.4341	0.8607	0.1328	0.0008	0.0601	0.0601	67.1
Rubber Tired Dozers Composite	1.5961	3.2672	0.3644	0.0025	0.1409	0.1409	239.1
Plate Compactors Composite	0.0263	0.0328	0.0052	0.0001	0.0021	0.0021	4.3
Trenchers Composite	0.5080	0.8237	0.1851	0.0007	0.0688	0.0688	58.7
Air Compressors	0.3782	0.7980	0.1232	0.0007	0.0563	0.0563	63.6
Cement and Mortar Mixers	0.0447	0.0658	0.0113	0.0001	0.0044	0.0044	7.2
Cranes	0.6011	1.6100	0.1778	0.0014	0.0715	0.0715	128.7
Generator Sets	0.3461	0.6980	0.1075	0.0007	0.0430	0.0430	61.0
Tractors/Loaders/Backhoes	0.4063	0.7746	0.1204	0.0008	0.0599	0.0599	66.8
Pavers Composite	0.5874	1.0796	0.1963	0.0009	0.0769	0.0769	77.9
Paving Equipment	0.0532	0.1061	0.0166	0.0002	0.0063	0.0063	12.6

Source: CARB 2007a and 2007b.

Table A-3 Heavy Equipment Emissions (Tons per Year)

Equipment	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Excavators Composite	0.2681	0.6095	0.0780	0.0006	0.0335	0.0335	55.0074
Rollers Composite	0.3994	0.7918	0.1222	0.0007	0.0553	0.0553	61.6887
Rubber Tired Dozers Composite	1.4684	3.0058	0.3353	0.0023	0.1296	0.1296	219.9772
Plate Compactors Composite	0.0242	0.0302	0.0047	0.0001	0.0019	0.0019	3.9687
Trenchers Composite	0.4674	0.7578	0.1703	0.0006	0.0633	0.0633	54.0236
Air Compressors	0.1740	0.3671	0.0567	0.0003	0.0259	0.0259	29.2594
Cement and Mortar Mixers	0.0309	0.0454	0.0078	0.0001	0.0031	0.0031	5.0012
Cranes	0.4839	1.2961	0.1432	0.0011	0.0576	0.0576	103.5770
Generator Sets	0.1592	0.3211	0.0494	0.0003	0.0198	0.0198	28.0566
Tractors/Loaders/Backhoes	0.6542	1.2470	0.1939	0.0012	0.0964	0.0964	107.5583
Pavers Composite	0.2702	0.4966	0.0903	0.0004	0.0354	0.0354	35.8504
Paving Equipment	0.0490	0.0976	0.0153	0.0001	0.0058	0.0058	11.6177
Total	4.45	9.07	1.27	0.0079	0.53	0.53	715.59

Table A-4 Painting

VOC Content	0.84	lbs/gallon	
Coverage	400	sqft/gallon	
Emission Factor	0.0021	lbs/sqft	
Building/Facility	Wall Surface	VOC [lbs]	VOC [tpy]
All Buildings Combined	750000	1575.0	0.788
Total	750000	1575.00	0.79

Table A-5 Delivery of Equipment and Supplies

Number of Deliveries	4						
Number of Trips	2						
Miles Per Trip	30						
Days of Construction	230						
Total Miles	55200						
Pollutant	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Emission Factor (lbs/mile)	0.0219	0.0237	0.0030	0.0000	0.0009	0.0007	2.7
Total Emissions (lbs)	1211.59	1308.93	165.20	1.42	47.26	40.81	150112.8
Total Emissions (tpy)	0.61	0.65	0.08	0.0007	0.02	0.02	75.06

Source: CARB, 2007a.

Table A-6 Paving Off Gasses

VOC Emissions Factor	2.62	lbs/acre	
Building/Facility	Area [acres]	VOC [lbs]	VOC [tpy]
All Combined Parking	5.56	14.58	0.0073
Total	5.56	14.58	0.0073

Source: SQAQMD, 1993.

Table A-7 Surface Disturbance

TSP Emissions	80	lb/acre				
PM ₁₀ /TSP	0.45					
PM _{2.5} /PM ₁₀	0.15					
Period of Disturbance	30	days				
Capture Fraction	0.5					
	Area [acres]	TSP [lbs]	PM ₁₀ [lbs]	PM ₁₀ [tons]	PM _{2.5} [lbs]	PM _{2.5} [tons]
	19.6	47040	21168	10.58	1588	0.79
Total	19.6	47040	21168	10.58	1588	0.79

Sources: USEPA, 1995 and USEPA, 2005.

Table A-8 Worker Commutes

Number of Workers	80						
Number of Trips	2						
Miles Per Trip	30						
Days of Construction	230						
Total Miles	1104000						
Pollutant	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Emission Factor (lbs/mile)	0.0105	0.0011	0.0011	0.0000	0.0001	0.0001	1.1
Total Emissions (lbs)	11645.47	1217.58	1191.43	11.87	93.90	58.43	1213883.6
Total Emissions (tpy)	5.82	0.61	0.60	0.0059	0.05	0.03	606.94

Source: CARB, 2007a.

Table A-9 Total Construction and Demolition Emissions (tons per Year)

Activity/Source	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Construction Equipment	4.45	9.07	1.27	0.0079	0.53	0.53	715.59
Painting	0.00	0.00	0.79	0.0000	0.00	0.00	0.00
Delivery of Equipment and Supplies	0.61	0.65	0.08	0.0007	0.02	0.02	75.06
Paving Off Gasses	0.00	0.00	0.03	0.0000	0.00	0.00	0.00
Surface Disturbance	0.00	0.00	0.00	0.0000	10.58	0.79	0.00
Worker Commutes	5.82	0.61	0.60	0.0059	0.05	0.03	606.94
Total Construction Emissions	10.88	10.33	2.76	0.0146	11.18	1.37	1397.58

Table A-10 Boiler Emissions (Net)

Gross Area	176250.00	sf				
Heating Requirements	99000.00	btu/sf				
Total Annual Heat Required	17448.75	MMBTU				
Heating Value	150.00	MMBTU/1000 Gallons				
Total #2 Oil Used	116.33	10 ³ Gallons				
Pollutant	CO	NO_x	VOC	SO_x	PM₁₀	PM_{2.5}
Emission Factor (lb/1000 gal)	5.00	24.00	2.49	0.10	2.00	2.00
Total Emissions (tons)	0.29	1.40	0.14	0.01	0.12	0.12

1. Emission factors for all pollutants were obtained from US EPA's AP-42, Section 1.3. Conservatively assume that PM₁₀ = PM.

2. Assumed sulfur concentration 1%

3. Heating requirements obtained from Commercial Buildings Energy Consumption Survey, DOE, 2003.

4. #2 fuel oil considered worst-case scenario – use of natural gas at Fort Huachuca would be somewhat less than emissions shown herein.

Table A-11 Patrons Trips (Net)

Number of Patrons	235.00					
Number of Trips	8.70					
Miles Per Trip	60.00					
Days of Training	24.00					
Total Miles	2944080.00					
Pollutant	CO	NO_x	VOC	SO_x	PM₁₀	PM_{2.5}
Emission Factor (lbs/mile)	0.01	0.00	0.00	0.00	0.00	0.00
Total Emissions (lbs)	31055.44	3246.98	3177.23	31.64	250.41	155.82
Total Emissions (tons)	15.53	1.62	1.59	0.02	0.13	0.08

Source: CARB, 2007a.

Table A-12 Net Operational Emissions (tons)

Activity/Source	CO	NO_x	VOC	SO_x	PM₁₀	PM_{2.5}
Boiler Emissions	0.29	1.40	0.14	0.01	0.12	0.12
Patron Trips	15.53	1.62	1.59	0.02	0.13	0.08
Total Operational Emissions	15.82	3.02	1.73	0.02	0.24	0.19

This page intentionally left blank.

Appendix B

Economic Impact Forecast System

Economic Impact Forecast System (EIFS) Model

Socioeconomic Impact Assessment

Socioeconomic impacts are linked through cause-and-effect relationships. Military payrolls and local procurement contribute to the economic base for the ROI. In that regard, construction and renovation of lodging on Fort Huachuca would have a multiplier effect on the local and regional economy. With the Preferred Alternative, direct jobs would be created (e.g., construction jobs), generating new income and increasing personal spending. Such spending generally creates secondary jobs, increases business volume, and increases revenues for schools and other social services.

The Economic Impact Forecast System

The US Army, with the assistance of many academic and professional economists and regional scientists, developed EIFS to address the economic impacts of NEPA-requiring actions and to measure their significance. As a result of its designed applicability, and in the interest of uniformity, EIFS should be used in NEPA assessments. The entire system is designed for the scrutiny of a populace affected by the actions being studied. The algorithms in EIFS are simple and easy to understand but still have firm, defensible bases in regional economic theory.

EIFS was developed under a joint project of the US Army Corps of Engineers, the US Army Environmental Policy Institute, and the Computer and Information Science Department of Clark Atlanta University. EIFS is implemented as an online system supported by the US Army Corps of Engineers, Mobile District. The system is available to anyone with an approved user-ID and password. US Army Corps of Engineers staff is available to assist with the use of EIFS.

The databases in EIFS are national in scope and cover the approximately 3,700 counties, parishes, and independent cities that are recognized as reporting units by federal agencies. EIFS allows the user to define an economic ROI by identifying the counties, parishes, or cities to be analyzed. Once the ROI is defined, the system aggregates the data, calculates multipliers and other variables used in the various models in EIFS, and prompts the user for forecast input data.

The EIFS Model

The basis of the EIFS analytical capabilities is the calculation of multipliers that are used to estimate the impacts resulting from Army-related changes in local expenditures or employment. In calculating the multipliers, EIFS uses the economic base model approach, which relies on the ratio of total economic activity to basic economic activity. Basic, in that context, is defined as the production or employment engaged to supply goods and services outside the ROI or by federal activities (such as military installations and their employees). According to economic base theory, the ratio of total income to basic income is measurable (as the multiplier) and sufficiently stable so that future changes in economic activity can be forecast. That technique is especially appropriate for estimating aggregate impacts and makes the economic base model ideal for the environmental assessment and environmental impact statement process.

The multiplier is interpreted as the total impact on the economy of the region resulting from a unit change in its base sector; for example, a dollar increase in local expenditures due to an expansion of its military installation. EIFS estimates its multipliers using a location quotient approach on the

basis of the concentration of industries within the region relative to the industrial concentrations for the nation.

The user inputs into the model the data elements that describe the Army action: the change in expenditures, or dollar volume of the construction project(s); change in civilian or military employment; average annual income of affected civilian or military employees; the percent of civilians expected to relocate because of the Army's action; and the percent of military living on-post. Once those are entered into the EIFS model, a projection of changes in the local economy is provided. They are projected changes in sales volume, income, employment, and population. These four indicator variables are used to measure and evaluate socioeconomic impacts. Sales volume is the direct and indirect change in local business activity and sales (total retail and wholesale trade sales, total selected service receipts, and value-added by manufacturing). Employment is the total change in local employment due to the Preferred Alternative, including not only the direct and secondary changes in local employment, but also those personnel who are initially affected by the military action. Income is the total change in local wages and salaries due to the Preferred Alternative, which includes the sum of the direct and indirect wages and salaries, plus the income of the civilian and military personnel affected by the Preferred Alternative. Population is the increase or decrease in the local population as a result of the Preferred Alternative.

The PAL program at Fort Huachuca would require construction of new lodging and renovation of existing lodging. The working estimate for the cost of renovation and construction of the facilities (about \$61,000,000) was divided over the projected 5-year initial development period and entered as the change in expenditures (about \$12,200,000 per year). The Preferred Alternative would not change the number of military personnel assigned to Fort Huachuca.

The Significance of Socioeconomic Impacts

Once model projections are obtained, the Rational Threshold Value (RTV) profile allows the user to evaluate the significance of the impacts. The analytical tool reviews the historical trends for the defined region and develops measures of local historical fluctuations in sales volume, income, employment, and population. Such evaluations identify the positive and negative changes within which a project can affect the local economy without creating a significant impact. The greatest historical changes define the boundaries that provide a basis for comparing an action's impact on the historical fluctuation in an area. Specifically, EIFS sets the boundaries by multiplying the maximum historical deviation of the following variables:

		Increase	Decrease
Sales Volume	X	100%	75%
Income	X	100%	67%
Employment	X	100%	67%
Population	X	100%	50%

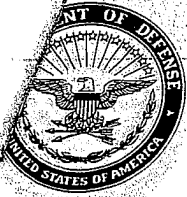
Those boundaries determine the amount of change that will affect an area. The percentage allowances are arbitrary, but sensible. The maximum positive historical fluctuation is allowed with expansion because economic growth is beneficial. While cases of damaging economic growth have been cited, and although many local planning groups are accepting the zero-growth concept, military base reductions and closures generally are more injurious to local economics than are expansion.

The major strengths of the RTV are its specificity to the region under analysis and its basis on actual historical data for the region. The EIFS model, in combination with the RTV, has proven

successful in addressing perceived socioeconomic impacts. The EIFS model and the RTV technique for measuring the intensity of impacts have been reviewed by economic experts and have been deemed theoretically sound.

The following are the EIFS input and output data for the Preferred Alternative and the RTV values for the ROI.

Appendix C Consultations



DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

REPLY TO
ATTENTION OF

Directorate of Public Works

JUL 27 2010

Louis Manuel, Chairman
Ak-Chin Indian Community
42507 West Peters and Nall Road
Maricopa, AZ 85239

Dear Chairman Manuel:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

A handwritten signature in cursive script, reading "Kimberlee K. Mulhern".

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC (with enclosure):

Caroline Antone, Cultural Resources Program Manager, Ak-Chin Indian Community, Ak-Chin
Him-Dak Eco Museum Road, Maricopa, AZ 85239



DEPARTMENT OF THE ARMY

US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

Directorate of Public Works

SEP -8 2010

Mr. James Garrison
State Historic Preservation Officer
Arizona State Parks
1300 West Washington
Phoenix, Arizona 85007

Dear Mr. Garrison:

Fort Huachuca is continuing formal Section 106 consultation at this time concerning the Privatization of Army Lodging (PAL). The background of this undertaking was sent to the SHPO on July 28th, 2010. The PAL will convey all Army Lodging assets to a private partner by 2011. A ground lease will have provisions for ingress/egress to historic properties enabling continuing Section 106 compliance by Fort Huachuca for the term of the lease. This undertaking may cause an adverse effect on the Historic Properties at Fort Huachuca. To mitigate any potential adverse effects, a binding programmatic agreement (PA) will become an exhibit to both the Environmental Impact Statement (EIS) and the ground lease. All existing PAs will be honored and made exhibits to the EIS and ground lease.

A draft PA, following the format of the previously accepted Residential Communities Initiative (RCI) PA from 2008, is enclosed here (Enclosure 1). Please review and comment to enable future drafts acceptable to the SHPO. When SHPO concurrence is reached, Fort Huachuca will send the approved draft to the National Park Service and the Advisory Council on Historic Preservation for concurrence.

We look forward to future consultation with the SHPO to implement the above described PA to better serve Fort Huachuca's personnel, Army mission, and continue functional use of historic buildings. If you have any questions, please contact Marty Tagg, Fort Huachuca Historic Properties Manager at (520) 533-4428 or marty.tagg@us.army.mil. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in cursive script, reading "Kimberlee K. Mulhern".

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

Enclosure



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

Directorate of Public Works

JUL 27 2010

Louis Manuel, Chairman
Ak-Chin Indian Community
42507 West Peters and Nall Road
Maricopa, AZ 85239

Dear Chairman Manuel:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC (with enclosure):

Caroline Antone, Cultural Resources Program Manager, Ak-Chin Indian Community, Ak-Chin
Him-Dak Eco Museum Road, Maricopa, AZ 85239



DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

REPLY TO
ATTENTION OF

Directorate of Public Works

JUL 27 2010

Jeff Houser, Chairman
Fort Sill Apache Tribe
Route 2, Box 121
Apache, OK 73006

Dear Chairman Houser:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Leland Michael Darrow, Historian



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

Directorate of Public Works

JUL 27 2010

William R. Rhodes, Governor
Gila River Indian Community
P.O. Box 97
Sacaton, AZ 85247

Dear Governor Rhodes:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Barnaby Lewis, THPO, Cultural Resource Management Program, Gila River Indian Community,
Department of Land and Water Resources, P.O. Box 2140, Sacaton, AZ 85247



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

JUL 27 2010

Directorate of Public Works

Leigh Kuwanwisiwma, Chairman
The Hopi Tribe
P.O. Box 123
Kykotsmovi, AZ 86039

Dear Chairman Kuwanwisiwma:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

Directorate of Public Works

JUL 27 2010

Carleton Naiche-Palmer, President
Mescalero Apache Tribe
P.O. Box 227
Mescalero, NM 88340

Dear President Naiche-Palmer:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Holly Houghten, Tribal Historic Preservation Officer, Resource Management and Protection



DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

REPLY TO
ATTENTION OF

Directorate of Public Works

JUL 27 2010

Peter Yucupicio, Chairman
Pascua Yaqui Tribe
7474 S. Camino De Oeste
Tucson, AZ 85746

Dear Chairman Yucupicio:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Rolando Flores, Assistant Attorney General



DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

REPLY TO
ATTENTION OF

Directorate of Public Works

JUL 27 2010

Wendsler Nosie, Sr., Chairman
San Carlos Apache Tribe
P.O. Box 0
San Carlos, AZ 85550

Dear Chairman Nosie:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Vernelda J. Grant, Archaeologist and Director, Historic Preservation and Archaeology
Department



DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

REPLY TO
ATTENTION OF

Directorate of Public Works

JUL 27 2010

Ned Norris, Jr., Chairman
Tohono O'odham Nation
P.O. Box 837
Sells, AZ 85634

Dear Chairman Norris:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Peter Steere, THPO, Natural Resources Department/Cultural Affairs Program
Joe Joaquin, NAGPRA Coordinator, Natural Resources Department/Cultural Affairs Program



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

JUL 27 2010

Directorate of Public Works

Ronnie Lupe, Chair
White Mountain Apache Tribe
P.O. Box 1150
Whiteriver, AZ 85941

Dear Chairman Lupe:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Mark Altaha, THPO, White Mountain Apache Tribe, P.O. Box 507, Whiteriver, AZ 85926



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

Directorate of Public Works

JUL 27 2010

Norman Coeeyate, Governor
Pueblo of Zuni
Zuni Tribal Council
P.O. Box 339
Zuni, NM 87327

Dear Governor Coeeyate:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Dr. Kurt Dongoske, Acting Director, Zuni Heritage and Historic Preservation Office



DEPARTMENT OF THE ARMY

US ARMY GARRISON
DIRECTORATE OF PUBLIC WORKS
3040 BUTLER ROAD
FORT HUACHUCA ARIZONA 85613-7010

REPLY TO
ATTENTION OF

Directorate of Public Works

JUL 27 2010

Diane Enos, President
Salt River Pima-Maricopa Indian Community
10005 E. Osborn Road
Scottsdale, AZ 85256

Dear President Enos:

Fort Huachuca is initiating formal Section 106 consultation with the Arizona State Historic Preservation Officer concerning privatization of lodging facilities on the Fort. The Fort will convey all Army lodging assets, consisting of 10 buildings and one heavily disturbed 11.4 acre land parcel, to a private partner by 2011. Three buildings contribute to the Fort Huachuca Historic District, and three others are over 50 years old and are potential historic properties. A ground lease will have provisions for ingress/egress to historic properties enabling the Fort Huachuca Historic Properties Manager, Mr. Marty Tagg, to continue oversight of Section 106 compliance by the Army for the terms of the lease.

This undertaking may cause an adverse effect on the Historic Properties of Fort Huachuca. To mitigate any potential effects, a binding Programmatic Agreement (PA) will become an exhibit to the NEPA documentation and the ground lease. The undertaking has no projected impact on Native American resources, because, although the 11.4 acre parcel is currently unimproved, it contained buildings and tent pads during World War II and is heavily disturbed. However, language relating to inadvertent discoveries of archaeological historic properties will be included in the PA.

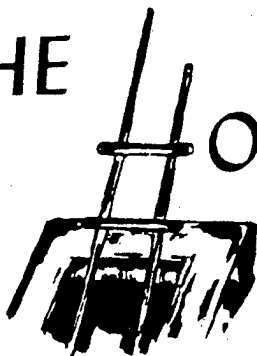
If you are interested in consulting on the project, or have any questions or concerns, please contact Mr. Tagg by telephone at (520) 533-4428 or by e-mail at marty.tagg@us.army.mil.

Kimberlee K. Mulhern, P.G.
Chief, Environmental and
Natural Resources Division

CC:

Shane Anton, Cultural Programs Supervisor
Angela Garcia-Lewis, NAGPRA

THE HOPI TRIBE



Leroy N. Shingoitewa
CHAIRMAN

Herman G. Honanie
VICE-CHAIRMAN

August 11, 2010

*Received
8-18-10
Kimberlee
K. Mulhern*

Kimberlee K. Mulhern, Chief, Environmental and Cultural Resources Division
Attention: Martyn Tagg, Historic Properties Manager
Department of the Army, US Army Garrison, Directorate of Public Works
3040 Butler Road
Fort Huachuca, Arizona 85613-7010

Dear Ms. Mulhern,

This letter is in response to your correspondences dated July 27 and 28, 2010, regarding privatization of lodging facilities on the Fort and the consultation meeting on September 21, 2010. The Hopi Tribe claims cultural affiliation to prehistoric cultural groups in Arizona, including the Hohokam prehistoric cultural group in southern Arizona. The Hopi Cultural Preservation Office supports the identification and avoidance of prehistoric archaeological sites, and we consider the prehistoric archaeological sites of our ancestors to be Traditional Cultural Properties. Therefore, we appreciate your continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office understands the privatization of lodging facilities may cause an adverse effect to historic properties but the undertaking has no project impact on Native American resources. Therefore, unless prehistoric cultural resources are inadvertently discovered, we defer on the Programmatic Agreement and further consultation on this project to the State Historic Preservation Office and other interested parties.

It is unclear at this time if we will be able to send a representative to the September 21st meeting. In any case, we look forward to ongoing consultation on the preservation and protection of the prehistoric cultural resources on Fort Huachuca. If you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural Preservation Office at 928-734-3619 or tmorgart@hopi.nsn.us. Thank you for your consideration.

Respectfully,

Leigh J. Kuwanwisiwma, Director
Hopi Cultural Preservation Office

xc: Arizona State Historic Preservation Office

INWU - HUA - PUB READ FILE

Acronyms and Abbreviations

AAC	Arizona Administrative Code
ACM	asbestos-containing material
ADEQ	Arizona Department of Environmental Quality
AGL	above ground level
AQCR	Air-Quality Control Region
amsl	above mean sea level
AZ	Arizona
BMP	best management practice
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CNA	Certificate of Non-Availability
CO	carbon monoxide
dBA	A-weighted decibel scale
DNL	Day-night average sound levels
DoD	Department of Defense
EA	environmental assessment
EIFS	Economic Impact Forecast System
EO	Executive Order
EPA	US Environmental Protection Agency
FTE	full-time equivalent
FICUN	Federal Interagency Committee on Urban Noise
FNSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
ft	feet, foot
FY	fiscal year
GHG	greenhouse gases
IDP	initial development period
LBP	lead-based paint
LDMP	Lodging Development Management Plan
LTH	long-term hold
LLC	Limited Liability Company
MHPI	Military Housing Privatization Initiative
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NO _x	oxides of nitrogen
NHL	National Historic Landmark
NHLD	National Historic Landmark District
NHPA	National Historic Preservation Act
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	ozone
NEPA	National Environmental Policies Act
PA	Programmatic Agreement
PAL	Privatization of Army Lodging
PCB	polychlorinated biphenyls
PCS	Permanent Change of Station
pCi/L	picocuries per liter
PM ₁₀	particulate matter less than 10 microns in diameter

R4SB	riverine, intermittent (wetland type classification)
RCRA	Resource Conservation and Recovery Act
ROI	region of influence
RTV	rational threshold value
SHPO	State Historic Preservation Office
SO ₂	sulfur dioxide
SPRNCA	San Pedro Riparian National Conservation Area
STH	short-term hold
SWPPP	stormwater pollution prevention plan
TCP	Traditional Cultural Property
TDY	Temporary Duty
tpy	tons per year
UPH	Unaccompanied Personnel Housing
USACE	US Army Corps of Engineers
USACHPPM	US Army Center for Health Promotion and Preventive Medicine
USC	United States Code
USEPA	US Environmental Protection Agency
USPB	Upper San Pedro River Basin
VOC	volatile organic compounds